



Concrete Sustainability Council

Technical Manual - Version 2.1

The Concrete Sustainability Council (CSC)

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Copyright

Any and all intellectual property and other rights (including, but not limited to, registered or non-registered trademark rights, copyrights, database rights, inventions, patent rights, design rights, know-how, etc.) ("Intellectual Property Rights") attaching to the Concrete Sustainability Council (CSC) System shall remain with and belong to CSC.

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Welcome to the CSC Certification System

The Concrete Sustainability Council (CSC) was founded in November 2016 after several years of preparatory work led by the Cement Sustainability Initiative (CSI), a sector project within the World Business Council for Sustainable Development (WBCSD).

The CSC Vision is: Concrete – Building a sustainable, safe, durable and comfortable future.

The CSC Mission is to promote and demonstrate concrete as a sustainable building material to enable informal decisions in construction.

In January 2017 the CSC launched its certification system for responsibly sourced concrete that serves the following purposes:

- **Demonstrate leadership:** document the high level of sustainability the sector has already achieved and showcase pioneering new practices
- **Improve the sector's sustainability performance:** provide benchmarks and incentives for continuously improving management, environmental and social performance along the full value chain
- **Add value for customers:** achieve recognition in green building rating systems such as BREEAM, DGNB, LEED or ENVISION
- **Make the sector more transparent:** provide a common global framework that allows stakeholders of all types – neighbours, NGOs, financing institutions and others – to understand the sustainability performance of a plant
- **Build a strong sector brand:** work towards a widely recognized trademark that is universally known for its credibility

To ensure these goals are reached, the CSC has developed the processes and criteria laid down in this Technical Manual. There are a number of key principles that guide this certification system:

- The system was developed in collaboration with a significant number of stakeholders, including both practitioners from the construction & material sector and external experts in the various fields of the criteria.
- The audit process and the issuance of certificates is the sole responsibility of independent certification bodies.
- The CSC system offers flexibility with respect to the scope of a certification. While a significant fraction of the overall weighting depends on the supply chain of the concrete plant (cement and aggregates), it is possible for individual concrete plants to achieve certification even if their suppliers are not yet certified.
- The system allows for local adaptation while maintaining the robustness of the certification. Certain safeguards – such as a rigorous approval process for local versions and full transparency about adaptations – guarantee that local conditions are integrated without watering down the global standards.

The CSC certification is applicable worldwide with the substantial support of Regional System Operators (RSOs) in specific countries.

For the list of RSOs partnering with the CSC please follow this link:

<https://www.concretesustainabilitycouncil.com/regional-system-operator-rso-15>

If a RSO has published a local version of the CSC Technical Manual, this version must be applied in the respective region.

Version History

V1.0 In January 2017, the Concrete Sustainability Council launched the initial version of the CSC certification system for responsibly sourced concrete and its supply chain.

V2.0 This major review was launched in January 2019. It took into account the various recommendations from the technical committee and the feedback obtained from customers and other external stakeholders, such as leading green building labels. Major changes included increasing the minimum score required for achieving CSC certification at the entry level "Bronze", introducing specific benchmark values, mandatory criteria for CSC certification at the level "Silver" or higher, and some entirely new assessment criteria, e.g. in the sections energy & climate and occupational health and safety. Additional system modules were published for mobile concrete plants, for recycled aggregate production sites, for cement grinding plants and for concrete products using recycled aggregates.

V2.1 This update was launched in January 2021. Based on a broad stakeholder feedback received as well as further alignment with leading green building labels, some individual criteria were updated. Also certification at the level "Platinum" was made available right from the beginning.

Acknowledgements

The Concrete Sustainability Council expresses its appreciation to all persons involved in the development of the previous CSC-certification system versions launched since January 2017.

This new update of the certification system, Version 2.1, was once again developed in a collaborative approach. Main contributors include:

Enterprises

- Buzzi Unicem Group, represented by Isabella Bussi
- CEMEX, represented by Enrique Terrado
- HeidelbergCement, represented by Christian Artelt, Hartmut Drescher, Zsafia Gera, Kyle Gilmour, Carolyn Jewell, Patrick Liebmann, and Michael Müller-Pfeiffer
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Industry Associations

- BTB, represented by Andreas Tuan Phan
- ERMCO, represented by Marco Borroni
- Fedbeton, represented by Bert Schrijver
- GCCA, represented by Andrew Minson
- THBB, represented by Asli Özbora

Certification Bodies

- Kiwa, represented by Pleun Kleinveld

who helped develop the system via their contributions to the CSC's Technical and Executive Committee and via providing their dedicated expertise and guidance

And

Civil Society Organisations

- Bellona, represented by Ana Serdonen
- Birdlife International, represented by Martin Hollands
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And

Labor Organisations

- IG BCE and IG BAU, represented by Norbert Steinert

And

Green Building Councils

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- DGNB, represented by Anna Braune, Johannes Kreißig and Karen Sternsdorff
- GBCI Europe, represented by Kay Killmann

And

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- ETH Zürich, represented by Guillaume Habert
- Hochschule München, represented by Natalie Eßig
- Massachusetts Institute of Technology (MIT), represented by Jeremy Gregory
- OST-Ostschweizer Fachhochschule, represented by Simone Stürwald
- RWTH Aachen University, represented by Thomas Matschei

who, by means of their expertise and guidance, provided valuable input during the CSC's Stakeholder Consultation Process.

The Concrete Sustainability Council would like to thank all contributors for their valuable input and in particular for their personal dedication and engagement throughout the whole development process of this new CSC-certification system version.

1 Introductions to the CSC System

1.1 CSC Certification System

CSC Certification System

The CSC Certification System for Concrete is being issued and maintained by the [Concrete Sustainability Council \(CSC\)](#) and applicable globally. In regions with a substantial interest in sustainable concrete certifications, the CSC is implementing and adapting the CSC system in partnership with [Regional System Operators](#)

Scope of certification

The CSC system is a product certification system, which typically applies to all products manufactured and supplied by the plant. Ready-mix concrete plants and precast concrete plants can obtain a 'CSC certificate'.

Cement and aggregate suppliers can obtain a 'CSC supplier certificate'. The CSC supplier certificates are being recognized in the CSC concrete certification in the category 'Chain of custody'.

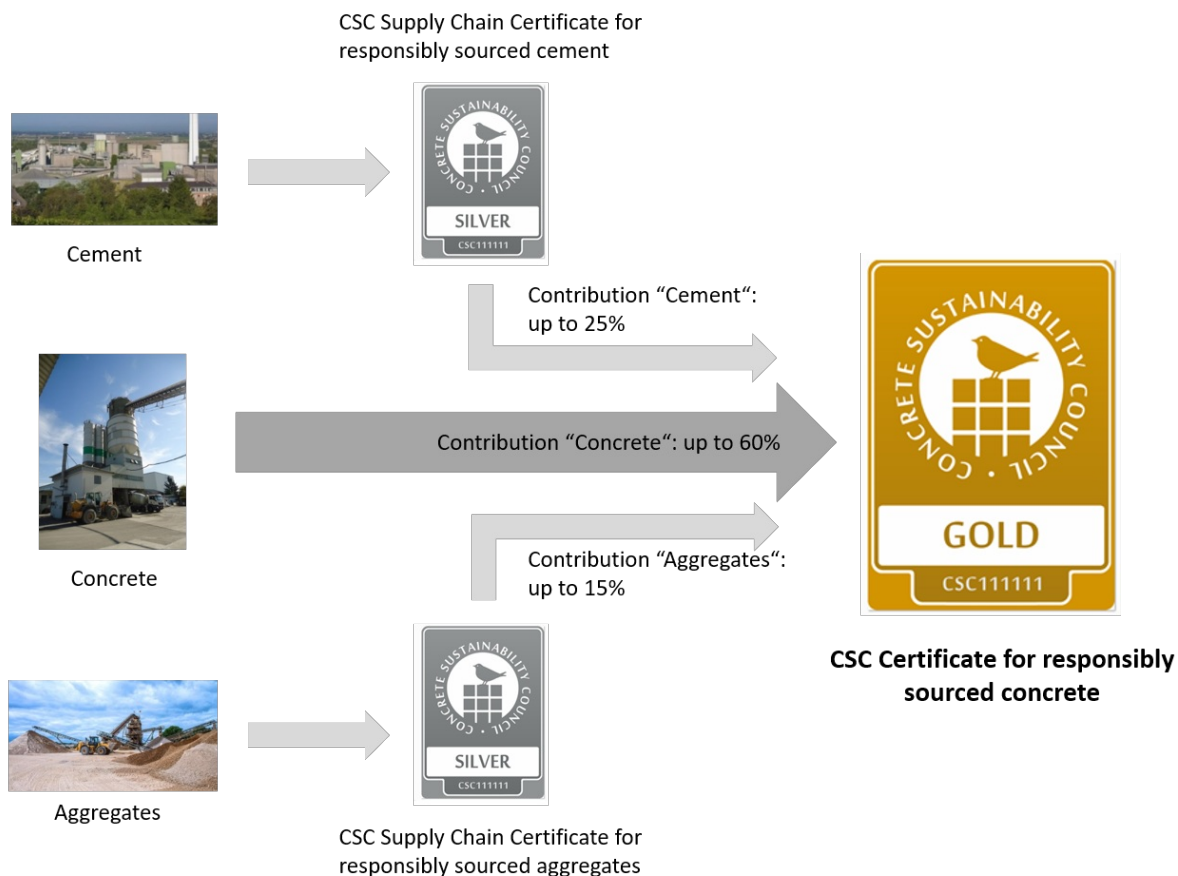


Fig.:

Schematic description of the weighting of different activities.

Specification of the scope – What is being supported by the CSC certification system?

CSC Certificate

Concrete Plants: Concrete plants are permanent plants to produce ready-mix concrete or precast concrete elements out of cement, aggregates, water and other mineral components and admixtures.

Mobile Concrete Plants: Mobile concrete plants are installed for specific projects and in proximity to the respective construction sites. Once a project is done, the mobile plant will typically be (re)moved. Thus, at the exception from its changing location, a mobile plant operates like a normal concrete plant.

Dry Mortar Plants: Dry mortar plants can be certified using the concrete system, provided that the binder of the dry mortar is based on cement.

CSC Supplier Certificate – Cement

Cement Plant: Cement plants are integrated production facilities with a clinker line to produce cement out of limestone and other mineral components. The key components of a cement production process are quarrying, raw material pre- processing, clinker production, grinding, blending and logistics.

Cement grinding stations: Cement production in cement grinding plants is performed by co-grinding clinker and gypsum in dedicated mills (e.g. ball mills, vertical roller mills), and by possibly using further cementitious materials such as slag, fly ash or limestone. Cement grinding plants are not equipped with a kiln and their cement production consequently depends on (external) clinker supply. Most of the environmental impact of cement production is related to clinker production (e.g. quarrying, emissions) and it is consequently necessary for cement grinding plants undergoing CSC certification to prove that the processed clinker they use is produced in a responsible manner.

CSC Supplier Certificate - Aggregates

Aggregate Plant: Aggregates plants are quarrying and processing various types of gravel, coarse aggregates and sand.

Recycled aggregates plants: Recycling plants are using secondary raw materials for producing sand and aggregates. Main material sources include construction and demolition waste (C&DW), concrete rubble and hardened returned concrete. The processing of these materials into sand and aggregates is similar as of hardrock and includes crushing, sieving and possibly other process steps such as sorting and washing. Unlike traditional aggregate producers, recycling plants do not maintain a quarry.

Mobile recycling plants: Mobile recycling plants are installed for specific projects and in proximity to the respective demolition sites. Once a project is done, the mobile plant will typically be (re)moved. Thus, at the exception from its changing location, a mobile plant operates like a normal recycled aggregates plant.

Aggregate distribution site: Aggregate distribution sites (= “extended factory gate”) can be certified using the CSC aggregate system, provided that the aggregates come from the processing plant and quarry of its mother or sister company and it is ensured that the material sold by the distribution site is sourced by 100% from that quarry. The processing plant and quarry are being audited, which means evidence must also cover the processing plant and quarry.

Aggregate Crusher Plants: Aggregates are generally extracted from a quarry or a pit and subsequently processed. Pure aggregate crusher plants do not own their own quarry or gravel pit and their aggregate production consequently depends on (external) raw aggregate supply. Some of the relevant environmental impacts of aggregate production is related to raw aggregate production (e.g. quarrying,) and it is consequently necessary for aggregate crusher plants undergoing CSC certification to prove that the raw aggregate they use is quarried in a responsible manner.

Specification of the scope – What is NOT being supported by the CSC certification system?

Dry Mortar Plants: Dry mortar cannot be certified, if the binder of the dry mortar is not based on cement.

Marine aggregates: Marine aggregates cannot be certified until the release of a dedicated system.

What CSC-system do I chose?

Depending on the object of certification, specific CSC certification systems may apply. The following CSC certification systems are applicable:

Object of Certification	CSC-System
Ready-mix concrete plant	Concrete System
Precast concrete plant	
Mobile concrete plant*	
Dry mortar plant (only if the binder of the dry mortar is based on cement.	
Cement plant	Cement System
Cement grinding station	Cement grinding system
Aggregate plant	Aggregate System
Recycled aggregates plant	Recycled aggregate system
Mobile recycling plant*	
Aggregate distribution site	Aggregate System
Aggregate Crusher Plant	Aggregate Crusher System

*If a mobile concrete plant/ recycling plant is the object of certification, all criteria at the exception of E2.02 "Responsible Land Use" apply. E2.02 is automatically achieved for mobile recycling plants (points achieved by default).

Content of certification

The plant under certification must fulfill certain prerequisites to obtain a CSC certificate.

- Prerequisites (all credits starting with an 'P'), no point can be achieved

The plant under certification can score points in the following categories:

- Management (all credits starting with an 'M')
- Environmental (all credits starting with an 'E')
- Social (all credits starting with an 'S')
- Economics (all credits starting with an 'B')
- Chain of custody (all credits starting with an 'C')

Some of the criteria are mandatory for certification levels higher than Bronze.

Scoring & certification levels

The CSC certification system pursues the concept of continuous improvement in the responsible sourcing of concrete. The system offers four levels of certificates, to stimulate the strive for a next higher level: **Bronze, Silver, Gold and Platinum.**

Each level is the result of a weighted scoring, taking into account the individual scores from concrete, cement and aggregates.

Validity

A CSC certificate is valid for three years from the day of issuing. A CSC supplier certificate is valid for three years from the day of issuing.

1.2 Certification Process

The following describes a typical certification process as it is suggested particularly for companies undergoing their first certification. Depending on company- and project-specific circumstances, there may be variations, e.g. the Certification Body may be chosen earlier in the process.

Step 1: Getting informed

- Drafting the intended scope of certification: What concrete plants shall undergo the certification process? What part of the supply chain (cement and aggregates) is already certified or will undergo certification?
- Gather generic information from the CSC-webpage, see: <http://www.concretesustainabilitycouncil.com>
- Perform a free Quick Scan to evaluate your performance in responsible sourcing. Go to: <https://toolbox.concretesustainabilitycouncil.com/quickscan/create>
- Check whether a Regional System Operator (RSO) is available and what additional services it offers.

Step 2: Kick off your project

- Define responsibilities such as project lead, gathering of evidence, obtaining offers from certification bodies and uploading of evidence.
- Identify internal and external contact points for obtaining evidence documents (e.g. HR department for labor-related criteria).
- Set up support tools for internal collaboration (e.g. mailing list, dedicated folders to store collected evidence documents).

Step 3: Register as user of the CSC-toolbox

- Go to: <https://auth.concretesustainabilitycouncil.com/user/register>
- Wait for the CSC helpdesk to confirm your chosen Username and Password.
- Please use your company email address to be accepted as a user.

Step 4: Purchase licenses for your CSC certification project

- The company buys one or more registration rights (see 3.5 Fees). The purchase of at least one registration rights is necessary for accessing the toolbox for other purposes than performing a "Quickscan".
- Registration rights can be purchased in your account under 'settings' / "licenses": <https://auth.concretesustainabilitycouncil.com/license/index>
- You will find the number of registration rights needed to obtain the certification license for a plant here: <https://www.concretesustainabilitycouncil.com/csc-license-fee-23>
- Purchasing a bundle of licenses reduces the costs per license. CSC members are eligible for additional discounts.

Step 5: Create your project

- The company first defines the project(s) in the Toolbox. This requires specifying the plants that will undergo certification and the assessment type (cement/ concrete/ aggregates).
- Go to: <https://auth.concretesustainabilitycouncil.com/login/?action=firstVisit&returnUrl=https://concretesustainabilitycouncil.com/site/singleSignOn>
- and follow the instructions
- The project information (incl. name/address of the company/plant) will be used for the certificate.

Step 6: Gathering of evidence

- In the assessment, all relevant evidence needs to be collected and uploaded via the toolbox. Furthermore, appropriate explanation for the assessor (see step 4) must be provided.
- Identify the criteria the plants undergoing certification are compliant with.
- Gather related evidence documents (e.g. guidelines, policies, procedures, photo evidence, plant data and management systems documentation).
- Submit evidence relating to credit "B3 Innovation" to the Innovation Committee (IC) for assessment. Detailed information on the related process is provided in a dedicated chapter. As this process requires some time it is advisable to submit the evidence as early as possible.

Step 7: Choose a certification body

- The company has to select a CSC accredited CB latest after project registration. The CB appoints an assessor to the project. Auditing costs are subject of a dedicated agreement between the client and the CB.
- Choose your Certification Body (CB) amongst the CSC-accredited bodies listed on the website: <https://concretesustainabilitycouncil.org/index.php?pagina=members>
- Indicate your choice in the "CSC Toolbox" under the frame of your registered project.
- The chosen CB will nominate an assessor and indicate this in the Toolbox.
- It is advisable to perform this step before Step 6 is finalized; this will increase the probability that the assessor is available as soon as all evidence is ready for review.

Step 8: Upload your evidence

- Upload your evidence in the "CSC Toolbox" under the frame of your registered project and provide additional explanation where helpful to accelerate the assessor's verification process.
- For multiple certifications, you can copy generic evidence from one project to another

Step 9: Register your project

- Formal registration of the certification project(s) is necessary to start the certification process. On registration the certification licenses are used. The terms and conditions have to be accepted.

Step 10: The assessor's verification process

- The assessor checks the evidence uploaded in the Toolbox and during site-visits.
- The assessor will typically first carry out a desktop review of the submitted evidence.
- An on-site audit at selected plants will allow the assessor to verify the evidence on site: number of visited plants = $0.7 \times \text{square root of the number of plants undergoing certification}$
- In case there is a regional system operator, regional requirements for site visits can apply.
- In case the assessor identifies non-conformities and improvement opportunities the client will be requested to submit additional evidence.
- Once satisfied the assessor closes the certification and informs the CB accordingly.
- The certification body performs quality assurance activities on the work of the assessor. The assessor validates each criterion and explains why the points are achieved or denied.

Step 11: Certification

- The CB issues and publishes the certificate, see: <https://toolbox.concretesustainabilitycouncil.com/certifiedProjects>
- The first two pages of the certificate become available as a download on the CSC website at the publication date agreed between the CB and the company.
- The certificate is valid for three years.

1.3 Roles in the Certification Process

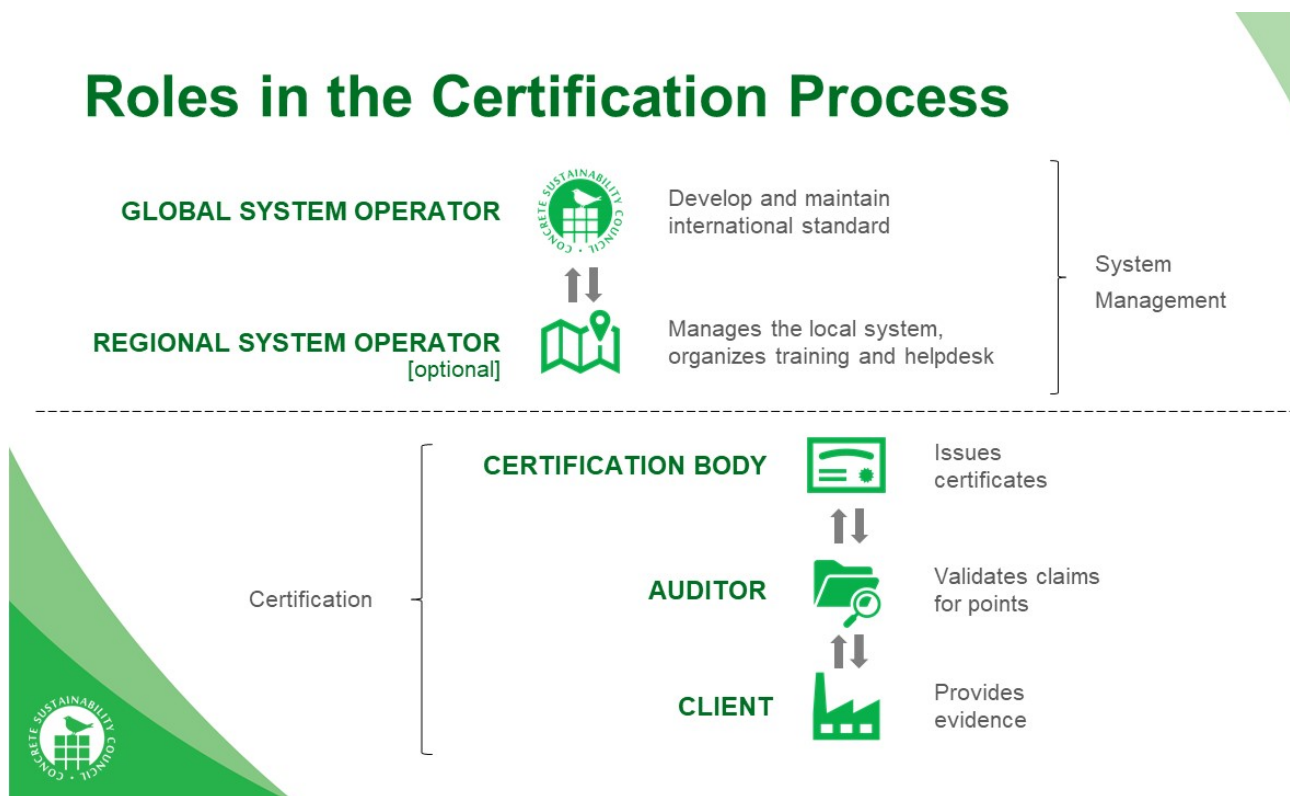


Fig.: The different actors in the certification process

Global System Operator

The Concrete Sustainability Council CSC is the Global System Operator and maintains and develops the international certification system, including the auditing software ("Toolbox"). All system adjustments need to be approved by the CSC's executive committee prior to implementation.

The CSC is not involved in the certification process. However, companies wanting to certify buy licenses directly from the CSC. The global CSC is also the Client's first contact for information if there is no Regional System Operator for plants to be certified.

Regional System Operator (RSO)

The Regional System Operator supports the CSC at national / regional level with implementing and maintaining the CSC certification system and is the Client's first contact for information regarding the CSC certification system. The RSO's key responsibilities include marketing, providing training, helpdesk activities, and lobbying. The RSO also provides translations of relevant documents (e.g. technical manual) into local language.

Where appropriate, the RSO may propose local adjustments of the technical framework. Adjustments must exclude minimum requirements (prerequisites, mandatory credits for higher certification levels), category names and certification thresholds. All adjustments need to be approved by the CSC.

Such as the CSC, the RSO is not involved in the certification process.

Please note that the RSO is an optional element in the sense that plants can still get certified if there is no RSO for the corresponding country or region.

For the list of active RSOs please follow this link:

<https://www.concretesustainabilitycouncil.com/regional-system-operator-rso-15>

Certification Body (CB)

A CSC-accredited Certification Body is the Client's key contact while undergoing certification. The CB manages the certification process: It assigns a qualified Auditor to review evidence documents provided by the Client and to perform exemplary on-site audits. After the successful completion of the certification process, the CB issues the certificates and publishes them.

While the CB can be freely chosen amongst the CSC-accredited bodies, it will act independently from the Client, the RSO and the CSC.

For the list of CBs please follow this link:

<https://www.concretesustainabilitycouncil.com/certification-bodies-22>

Auditor

The Auditor is a person trained according to the requirements of the CSC. The main task of the Auditor is to review the evidence documents provided by the Client and to perform exemplary on-site audits. Auditors are often, but not necessarily, employees of a CB.

The Auditor is independent from the Client, the RSO and the CSC.

Client

The Client is the organization seeking CSC certification. The Client explains how the different assessment criteria have been met and provides the required underlying evidence via the CSC toolbox.

1.4 Support

Support

Local support by Regional System Operators (RSOs)

In a growing number of regions, the CSC is supported by a Regional System Operator (RSO). The RSO provides support in the respective local language and is experienced with locally applicable legislation and standards.

For the list of RSOs partnering with the CSC please follow this link:

<https://www.concretesustainabilitycouncil.com/regional-system-operator-rso-15>

Certification Bodies

CSC-accredited Certification Bodies (CBs) provide dedicated support during the certification process.

For the list of CBs accredited by the CSC please follow this link:

<https://www.concretesustainabilitycouncil.com/certification-bodies-22>

Global Helpdesk

The CSC maintains a global helpdesk: helpdesk@concretesustainabilitycouncil.com

1.5 Toolbox

Toolbox

The certification process is supported by the CSC Sustainable Concrete Toolbox which is available under the following link:

<https://toolbox.concretesustainabilitycouncil.com/>

The toolbox ensures that clients and certification bodies can carry out their certification process in an efficient and user friendly way. The toolbox is regularly improved, so feedback is welcome.

The toolbox offers three modules on the way to a CSC certification:

- *Quickscan*, rough estimate of a project. The use of the Quickscan is free of charge.
- *Pre-assessment*, self assessment of a certification project. The Pre-assessment requires the registration of a user account. Entered data can be transferred to the Assessment
- *Assessment*, scoring, uploading of evidence & submission. The Assessment requires the registration of a user account.

The entire CSC certification process is managed within the tool, see chapter 1.2 "The Certification Process"

For the English version of the instruction manual of the CSC toolbox: Click [here](#).

1.6 Terms & Conditions

The Terms & Conditions can be found under this link:

<https://www.concretesustainabilitycouncil.com/terms-conditions-25>

1.7 Use of the CSC Logo

Use of the CSC Logo

All Concrete Sustainability Council's (CSC) logos, trademarks, distinctive signs and designs belong only to the CSC. Any use of the CSC distinctive signs requires the prior written approval by CSC or a license under an agreement with the Certification Body.

The legitimate use of the logo is encouraged according to the "CSC Logo User Guide".

For the CSC Logo User Guide please follow this link:

<https://www.concretesustainabilitycouncil.com/csc-logo-user-guide-32>

Complaint of abuse of the CSC trademark and logo

If you think, the CSC trademark and logo is being abused, please report this using the following procedure:

1. Send your complaint to the relevant certificate holder; if not settled
2. Send your complaint to the certification body, mentioned on the certificate; if not settled
3. Contact the Regional System Operator; if not solved
4. If you think trademarks are being misused, please report this immediately by sending an email to helpdesk@concretesustainabilitycouncil.com

Reporting of false/deceptive claims

If you think trademarks are being misused, please report this immediately by sending an email to helpdesk@concretesustainabilitycouncil.com.

Surveillance of false/deceptive claims

CSC will check regularly the use of the CSC logo and trademark and takes the right to take legal action against any false/deceptive claims.

1.8 Certificate Validity and Withdrawal

Certificate Validity, Upgrading, Maintenance and Withdrawal of CSC Certificates

Validity period of the CSC-certificate

CSC certification is valid for three years. Once certification is obtained, the certificate holder must ensure remaining compliance with the performance level stated by the Certification Body (CB) at the moment of issuing the certificate.

The certificate expires after three years. It is necessary to undergo the full certification process prior to the certificate's expiration date to remain CSC certified.

You can find more detailed information in the Guidance Note "Recertification Process" ([Link](#)).

Certificate upgrading

The certificate holder has the right to improve its score and the related certification level at any moment in time by providing additional evidence. This additional evidence must be validated by a CB before an upgraded certificate can be issued. The upgrade is subject to a dedicated fee to be paid to the CSC. The expiration date of the upgraded certificate remains the same as the expiration date of the initial certificate, unless the certificate holder decides to undergo the full certification process.

In case the certificate holder opts for undergoing the full certification process, a new certificate is issued with a validity period of three years.

You can find more detailed information in the Guidance Note "How to upgrade your certificate" ([Link](#)).

Certificate Maintenance

It is an obligation of the certificate holder to report to the CB if the performance level stated by the CB during the moment of certification is no longer met. This is typically the case if part of the supply of cement and/or aggregates is switched back to non-certified producers, if management system certifications are discontinued, or if other criteria awarded during the certification process are no longer met.

If the reduced sustainability performance no longer justifies the current certification level, the CB issues – at the expense of the certificate holder – an updated certificate that reflects the new situation. The expiration date of the updated certificate remains the same as the expiration date of the initial certificate.

Certificate Withdrawal

In case it becomes obvious that a certificate holder fails to report a substantial decrease in its sustainability performance, the CB that previously issued the certificate holder's certificate has the right to withdraw the CSC certificate. All benefits related to CSC certification, such as the use of the logo, will automatically cease upon certificate withdrawal.

The CSC reserves the right to exclude plants, who have lost their certificate as a consequence for noncompliance, from getting re-certified for a period of up to five years.

Complaint procedure

In case of certificate withdrawal, the former certificate holder has the possibility of seeking arbitration by submitting to the CSC at

grievance@concretesustainabilitycouncil.com

a written complaint explaining why the certificate should not be withdrawn. The CSC Executive Committee (ExCo) will make a final decision on the complaint during the following scheduled meeting.

1.9 Grievance Procedure

The CSC is committed to facilitating consistent and timely evaluation of complaints and appeals raised by stakeholders against decisions, performances or any other issues within the CSC certification system.

CSC encourages its members and stakeholders to seek, prior to invoking the grievance management process, an amicable settlement to any grievance directly with the person, entity or organ of the Association whose action or decision is the subject of the grievance. In the course of this attempt at informal resolution, the complainant can seek support from the Chair of the Association, or the Secretariat of the Association, to serve as a mediator.

The CSC Grievance Management Process can be found here:

<https://www.concretesustainabilitycouncil.com/grievance-procedure-24>

Grievances shall be filed writing to: grievance@concretesustainabilitycouncil.com

2 Introduction Technical Manual

In this section you will find useful information to help you understand how the certification system works. It also contains a glossary of terms that explains abbreviations and defines the exact meaning of some regularly used terms.

The scope of the certification

All plants producing concrete (ready-mixed or precast), aggregates, or cement can undergo the CSC certification process. Successful concrete plants will receive a Certificate, while suppliers (aggregates, cement) will get a so-called Supplier Certificate so that stakeholders understand that this certification does not cover the full supply chain.

Prerequisites, credits, criteria, and points

This Technical Manual defines a number of prerequisites, credits and criteria that are relevant for the CSC certification.

Prerequisites are mandatory criteria for every plant or company. If one of the prerequisites is not met no score can be calculated. Please note that under no circumstances can prerequisites be waived.

The **score** of a plant is calculated based on the degree of fulfilment of the non-mandatory credits. One credit refers to one topic and may contain one or several criteria. For example, the credit E5 Water contains a number of criteria ranging from risk analysis to monitoring and reporting to implementation of improvement measures.

Points are earned for fulfilling individual criteria. It is not necessary to fulfil all criteria within a given credit, nor is it necessary to fulfil all or any of the preceding criteria in the same credit in order to achieve points (exceptions to this rule are clearly spelt out in the definition of the corresponding criteria). Not all criteria have the same number of points; the number of points that can be earned for each criterion was determined in multi-stakeholder discussions and reflects to the extent possible the relevance of the criterion.

Certification levels

The CSC system has a number of certification levels ranging from Bronze to Platinum. Getting a certain certification level requires compliance with all prerequisites and achievement of level-specific minimum scores. In addition, for all levels of Silver and above there are a number of mandatory credits that the plant must comply with.







In the case of concrete plants the overall score depends to a significant extent (40%) on the score that the suppliers of cement and aggregates have achieved. For more information on the weighting and certification levels please consider the following chapters.

Annexes

Supplementary information to the criteria, as well as regional adaptations and actualizations can be found in the Annex. Annexes can be downloaded here: <https://www.concretesustainabilitycouncil.com/concrete-sustainability-council-technical-manual-version-20-34>

2.1 Criteria of the System

This table shows an overview of credit of the CSC certification system. Individual criteria and their required evidences are described in chapter 4 "Technical Manual".

PREREQUISITES 	
P 1 Ethical and Legal Compliance P 2 Human Rights P 3 Indigenous Peoples Rights P 4 Environmental and Social Impact P 5 Traced Materials	
MANAGEMENT 	ENVIRONMENTAL 
M 1 Sustainable Purchasing M 2 Environmental Management M 3 Quality Management M 4 Health & Safety Management M 5 Benchmark	E 1 Life Cycle Impact E 2 Land Use E 3 Energy & Climate E 4 Air Quality E 5 Water E 6 Biodiversity E 7 Secondary Materials E 8 Transport E 9 Secondary Fuels
SOCIAL 	ECONOMICS 
S 1 Local Community S 2 Health Product Information S 3 Occupational Health & Safety S 4 Labor Practices	B 1 Local Economy B 2 Ethical Business B 3 Innovation B 4 Feedback Procedure
CHAIN OF CUSTODY 	
C 1 Cement	C 2 Aggregates

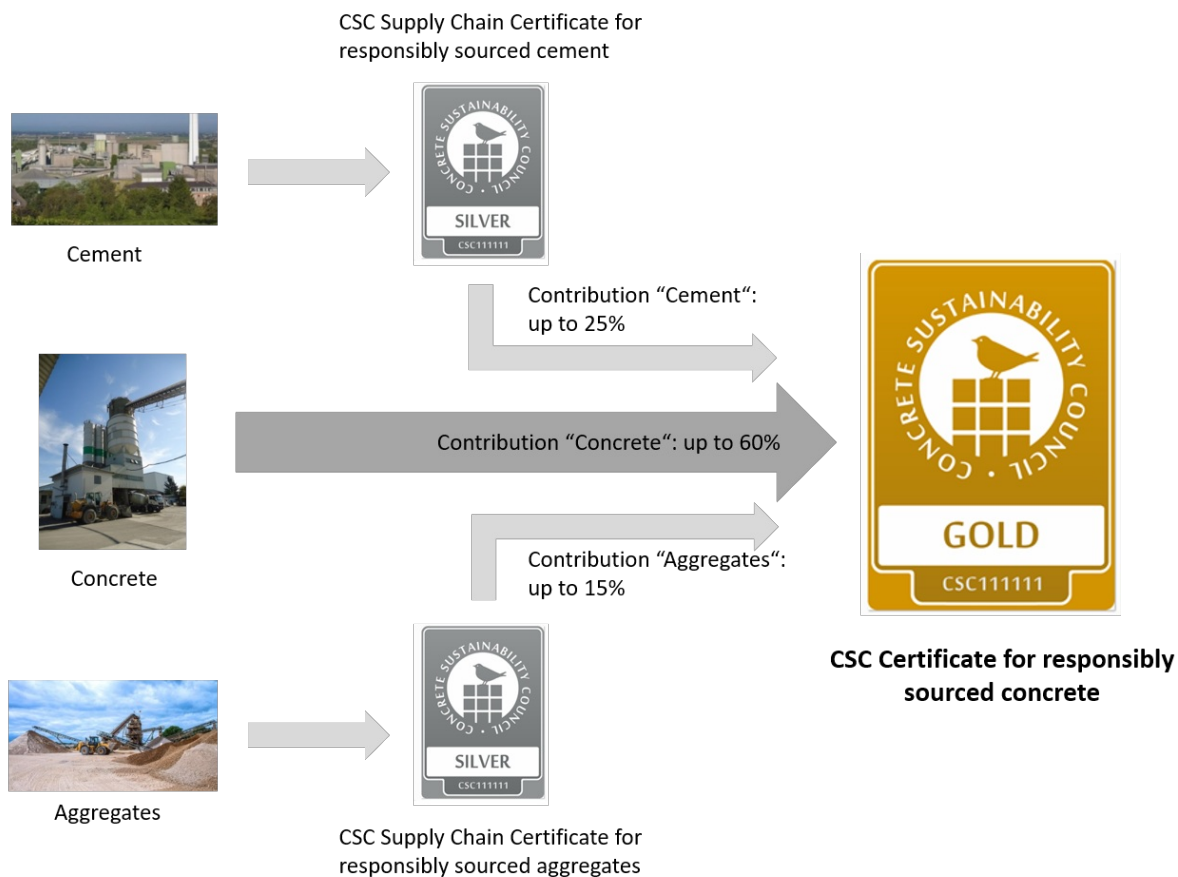
2.2 Structure and Certification Levels

Introduction

The CSC certification system is applicable to the following activities: concrete plants, cement plants, and aggregate quarries.

The CSC Certificate for a concrete plant always includes the performance of the supply chain (which has a weight of 40% of the total score).

The CSC Suppliers Certificate for cement and aggregates takes into account the performance of the respective plant and is used for providing the supply chain evidence needed for obtaining a CSC Certificate for concrete.



CSC Certificate for responsibly sourced concrete - weighting of the concrete plant and the supply chain performance.

Points and scores

For every criterion the CSC Technical Manual specifies the number of points that can be earned by concrete plants, cement plants and by aggregate production sites. The points the plant undergoing certification is compliant with are summed up and divided by the total number of points available; this percentage is the so-called score:

$$\text{score} = \frac{\text{Sum}(\text{points}_{\text{earned}})}{\text{Sum}(\text{points}_{\text{available}})} * 100\%$$

This score is the final score in the case of cement plants and aggregate production sites. For concrete plants, however, the score is only partial as the final score also depends on the scores of the respective cement and aggregate suppliers (see below). Concrete plants may be certified without assessing their supply chain. However, in this case the

maximum achievable score will be significantly lower.

Examples:

Aggregates plant: The maximum score for aggregate plants is 172. If a plant achieves 112 points its score is $112/172 = 65\%$.

Cement plant: The maximum score for cement plants is 240. If a plant achieves 185 points its score is $185/240 = 77\%$.

Concrete plant: The maximum score for concrete plants is 179. If a plant achieves 111 points its partial score (= "concrete score"), i.e. without considering the supply chain is $111/179 = 62\%$.

These examples will also be used to illustrate the calculation of the overall concrete score at the end of this chapter.

Weighting of different categories

The four main categories (management, environment, social topics, economic topics) do not have an equal weight and are not the same for concrete, cement and aggregate certification.

An overview over the available points by category and activity is given in the following table.

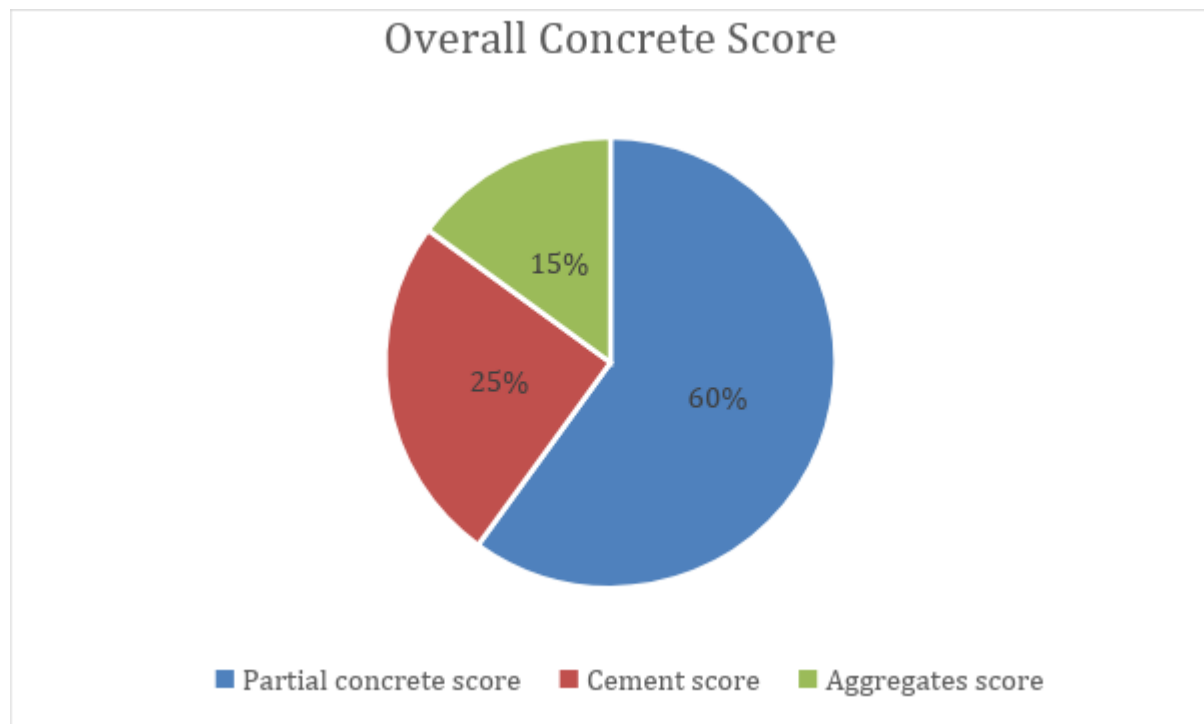
Calculation & weighting	Credits			Exemplary Performance		
	RMX	CEM	AGG	RMX	CEM	AGG
M - Management	33	33	33	1	1	1
E - Environment	73	137	72	4	4	3
S - Social	48	45	42	1	1	1
B - Economic	25	25	25	0	0	0
Total	179	240	172	6	6	5
	100%	100%	100%	3%	3%	3%

Overall score for a concrete plant

The overall score for a concrete plant depends 60% on the score for its own operations; the other 40% depend on the scores of its cement (25%) and aggregate (15%) suppliers, see also Fig. 1. Consequently, the overall score is calculated from the partial score for its own operations and the scores of its suppliers in the following way:

$$score_{overall} = 60\% * score_{concrete}[\%age] + 25\% * score_{cement}[\%age] + 15\% * score_{aggregate}[\%age]$$

Where $score_{cement}$ and $score_{aggregate}$ are the average scores (weighted by mass) of the cement and aggregate suppliers, respectively.



Certification levels for concrete plants and suppliers

The CSC has the following certification levels: Bronze, Silver, Gold, and Platinum

The following minimum score needs to be achieved:

	Bronze	Silver	Gold	Platinum
Concrete	35%	50%	65%	80%
Cement	60%	75%	90%	95%
Aggregates	60%	75%	85%	95%

Furthermore, the following **additional requirements** need to be fulfilled:

- The plant has to comply with all prerequisites
- The plant has to score the points in the mandatory criteria for the corresponding level. In case a criterion is mandatory for a certain certification level, this is indicated in a dedicated "Prerequisite to obtain" box in the respective criterion.
- For the certification level of Silver the partial score of the concrete plant has to be at least 60% (=> 36% of overall score)
- For the certification level of Gold and above the partial score of the concrete plant has to be at least 80% (=> 48% of overall score)
- For the CSC-certification level of "Platinum" a concrete plant must provide evidence for a supply chain coverage of 75% for cement AND for aggregates respectively. The coverage is proven by the respective mass of cement AND the mass of aggregates supplied from producers holding a CSC certificate at the level "Gold" or "Platinum".

Suppliers who have not achieved the minimum score for the Bronze level but who comply with all prerequisites contribute to the final score of their clients with their score but do not receive a certificate.

Examples of how to determine the certification level:

The following table resumes the scores of the different plants from the above example as well as the supplier scores that would be achieved.

Plant-level scores			
	Concrete	Cement	Aggregates
Points available	179	240	172
Points achieved	111	185	112
Supplier score		77%	65%
Supplier certificate		Silver* ¹	Bronze
Concrete score (= partial score)	62%		
Contribution to Concrete score* ²		19%	10%

*¹: assuming all applicable mandatory criteria are met

*²: assuming 100% of the corresponding material is supplied by the certified supplier

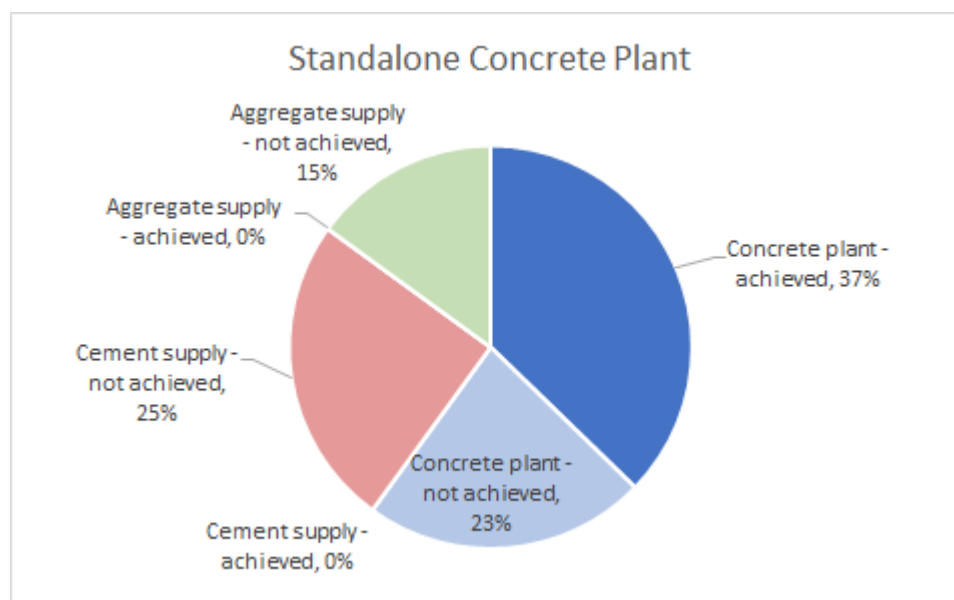
In the following examples these partial and supplier scores are used to illustrate how the final score of a concrete plant is calculated. *: assuming 100% of the corresponding material is supplied by the certified supplier.

Scenario 1: Stand-alone concrete plant

In this scenario we assume that only the concrete plant is certified, but none of its suppliers. The final score of the concrete plant is then calculated as follows:

62% (partial score concrete) * 60% (weight concrete) = **37%**

In this scenario the plant would receive a Bronze certificate. The following graph shows schematically how the overall score is derived.



Scenario 2: Concrete plant with certified cement supply

If in our example the concrete plant gets 100% of its cement from the certified supplier the latter will contribute to the final score of the concrete plant in the following way:

Cement contribution = 77% (cement score) * 25% (cement weight) = 19%

Adding this contribution to the partial score for concrete gives a final score of **56%**. The concrete plant would consequently receive a Silver certificate (assuming all mandatory criteria for this level are achieved).

Scenario 3: Concrete plant with certified cement and aggregates supply

If in addition to the situation in scenario 2 the concrete plant gets 100% of its aggregates from the certified supplier the latter will contribute to the final score of the concrete plant in the following way:

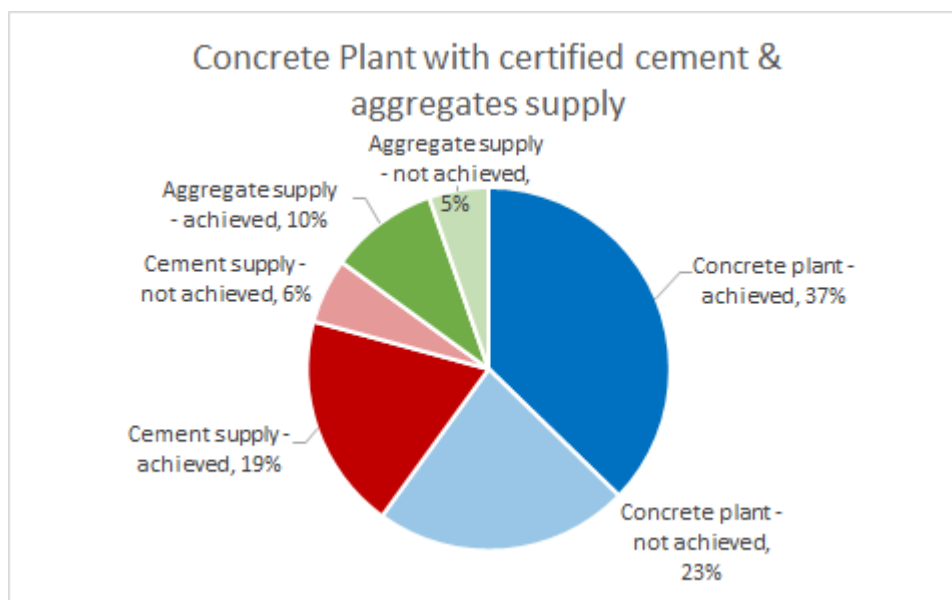
Aggregates contribution = 65% (aggregates score) * 15% (aggregates weight) = 10%

The sum of all partial scores in this example is the

37% (concrete) + 19% (cement) + 10% (aggregates) = **66%**

The concrete plant would consequently receive a Gold certificate (assuming all mandatory criteria for this level are achieved).

The following graph illustrates the calculation for this scenario.



Scenario 4: Concrete plant with partly certified cement supply

If in scenario 2 the concrete plant gets only 60% of its cement from the certified supplier the contribution of the latter to the final score of the concrete plant will be reduced accordingly:

Cement contribution = 77% (cement score) * 60% (share of certified cement) * 25% (cement weight) = 12%

Adding this contribution to the partial score for concrete gives a final score of **49%**. The concrete plant would consequently receive a Bronze certificate.

2.3 Glossary of Terms

Assessment

The process with which a registered CSC auditor/assessor determines the sustainability performance of a project based on the relevant system documents. The combined processes of audit, review, and decision on a client's conformity with the requirements of a standard (ISEAL Glossary of terms).

Assessment tool

A web-based information and communication software tool; the primary means of content communication between project, assessor and certification institute - also called Toolbox.

Audit

Systematic, documented process for obtaining records, statements of fact or other relevant information and assessing them objectively to determine the extent to which specified requirements are fulfilled (adapted from ISO 17000).

Auditor/ assessor

Qualified person who performs the audit.

Biodiversity

Degree of variation of life forms within a given species, ecosystem, biome or planet.

Chain of custody

A system or process used to maintain and document the chronological history and unbroken path that a product takes through a supply chain. For concrete to be responsibly sourced, its main constituents need to be responsibly sourced. The custodial sequence that occurs as ownership or control of the material supply is transferred from one custodian to another in the supply chain. (adapted from: WB, WWF Alliance for Forest Conservation and Sustainable Use, 2002)

Certification body (CB)

A regional body that performs quality assurance on assessment reports, trains auditors/assessors and experts, and issues certificates. It may suggest regional system differences to the global system operator.

Client

The company that seeks certification for its plant, product (or product range). The client composes a complete assessment report according to the CSC procedures and Technical Manual. In that report it claims points and explains how the assessment criteria have been met, providing the required underlying evidence.

CSC auditor

Also called "assessor"; a third party, independent person validating organizations' CSC assessment reports.

CSC expert

A person trained on the CSC system in order to assist a company in constituting the assessment report. This is not a formal role in the assessment process. An expert may be internal or external to the company.

Credit

A sustainability topic within the CSC system containing the assessment criteria to satisfy in order to achieve points, e.g. M1 - Sustainable Purchasing.

Criterion

A sustainability aspect (sub-topic) of a Credit containing specific requirements and evidence to provide in order to achieve points, e.g. M1.02 - Supplier assessment.

Environmental management system (EMS)

An EMS is generally one part of a larger management system used to establish an environmental policy and to manage the environmental aspects of an organization's activities, products and services.

Evidence

Prescribed documentation supporting the claim for achieving points within criteria.

(Global) system operator (GSO) - CSC

Independent body operating globally and responsible for developing and maintaining the certification system with all documents, procedures and requirements necessary to ensure the proper, reliable and effective application and certification against the system. The system operator has final responsibility for the global system content and oversees and regulates local adaptations. There is no working relationship between a GSO and a client, only in case of a client's complaint about a CB, a system operator or another topic.

Impact assessment

A systematic, objective and in depth, ex-post assessment of the medium or long-term effects, positive or negative, intended or unintended, of the implementation of a standards system. Impact evaluations employ methodologies that are designed to enable evaluation users to understand the extent to which an observed change can be attributed to the standard system or another intervention. (adapted from 3ie Impact Evaluation Glossary, 2012 and World Bank).

Management system

A network of interrelated elements. Elements include responsibilities, authorities, relationships, functions, processes, procedures, practices and resources. A management system uses these elements to establish policies and objectives and to develop ways of applying these policies and achieving these objectives.

Operations manual

This manual. Contains all operational procedures, tariff information, responsibilities, etc. required to properly operate the CSC system. Constitutes the operational part of the system, together with the Technical Manual.

Points

Per criterion, points can be achieved if evidences comply with the respective requirements. The total number of points determines - among others - the level of certification achieved.

Policy

Formal expression of a company's intent and direction with regards to an issue or set of issues, Source: ISO 26000

Prerequisite

A category of requirements in the CSC certification system that has to be achieved in order to get certified. In Version 2.1 also certain criteria are prerequisites to obtain a silver or higher level certificate.

Project

In the context of CSC certification, the project is the object or subject defined for certification; it is typically a plant, but can also be a product range or a product.

Quality assurance (QA)

A set of activities intended to establish confidence that quality requirements will be met. QA is one part of quality management.

Regional system operator (RSO)

In certain cases it may be practical to have a RSO to cover a region and suggest minor adaptations to the global

system.

Responsible sourcing

A holistic approach to managing a product from the point of raw material sourcing, through manufacturing and processing. Source: Building Research Establishment (BRE). Management of sustainable development in the provision or procurement of a product. BS8902

Responsible sourcing certificate

Shows stakeholders the level to which a company, plant or product operates in an environmentally, socially and economically responsible way.

Scope (certification scope)

The range of products that are part of the certification. Often the plant is chosen as the scope for certification (meaning all products produced in the plant are certified). However CSC is a product certification so other scopes are possible. Another scope can be all concrete delivered for construction product X. The certification body has to approve the scope.

Sustainability claims

A message used to set apart and promote a product, process, business or service with reference to one or more of the three pillars of sustainability (social, economic and/or environmental). Claims may be consumer-facing or business to business. Claims which are not clear and accurate may provide the user with misleading or even false information. (source: ISEAL)

Small or medium-sized enterprise

A small or medium-sized enterprise (SME) is defined as follows: micro, small and medium-sized enterprises are enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euros and/or an annual balance sheet total not exceeding 43 million euros.

Standard setting organization

Also called the system operator. The organisation responsible for managing the development or revision of a standard.

Technical Manual

Contains all assessment criteria and constitutes the operational part of the system. In order for a company to obtain CSC system certification, a minimum of criteria need to be satisfied in addition to mandatory prerequisites.

Common Synonyms (ISEAL Glossary of terms)

Term	Synonyms
Assurance	Certification, verification
Assurance Provider	Certification Institute, Certification body, verification body, conformity assessment body (CAB)
Audit	Inspection, evaluation, verification
Auditor	Inspector, verifier, assessor
Client	Customer, Operator, enterprise, participant, producer
System Owner	System operator

3 Supplementary Information

3.1 Credibility Principles

The ultimate aim of the CSC is to achieve positive impact in social, environmental and economic matters.

This is why the CSC certification system is based on the 10 ISEAL credibility principles:

1. Sustainability

The CSC certification system aims at achieving the following sustainability objectives:

- Improve the sustainable use of concrete by promoting responsible practices throughout the value chain and incentivizing continuous improvement;
- Ensure transparency in the concrete sector by making sustainable initiatives more visible and enable organizations to demonstrate leadership;
- Obtain tangible benefit for implementing responsible sourcing by getting recognition for the supply of CSC certified concrete in green building rating systems such as BREEAM, DGNB, LEED, GreenStar, HQE, etc.;
- Obtain recognition in "green procurement" government policies and policies for social procurement;
- Raise the public awareness regarding the sustainability of the concrete sector and its products;
- Improve the business case for responsibly sourced concrete.

A summary of the CSC's objectives can be found on the CSC website: <https://concretesustainabilitycouncil.com/>

The CSC certification system focuses on relevant challenges. Topics, credits and individual criteria were developed by the CSC Technical Committee following an in-depth analysis on responsible sourcing, numerous internal discussions and conducting dedicated stakeholder meetings (see below: "3. Relevance"): The certification system includes a number of prerequisites and addresses management systems, environmental, social and economic topics, as well as the supply chain. The topics covered by the CSC certification system are well reflecting the spirit and/or requirements of other certification systems/standards such as

- The responsible sourcing standard BS 8901
- Green building rating systems
- Former / existing systems addressing concrete and its supply chain such as Green Plant Guide (US) and BetonBewust (NL).

2. Continuous Improvement

Continuous improvement of the CSC certification system is an important lever to further evolve responsible sourcing practices. This is achieved via a number of dedicated levers, including

- regular discussions on the level of the CSC Technical Committee
- the CSC's annual report providing insight in previous year's certifications and built upon the Regional System Operators' and Certification Bodies' annual report
- harmonization meetings between the Certification Bodies
- exchange meetings with Regional System Operators
- exchanges with certificate holders
- stakeholder events with civil society and labor organizations

Comprehensive feedback was obtained since launching CSC certification system Version 1.0 and included into system Versions 2.0 and 2.1: Amongst other measures, the minimum score to achieve CSC certification level Bronze was increased to 35%, a broad range of mandatory criteria for certification levels Silver and above were introduced, and new criteria were added in a number of credits such as in "S3 Occupational Health and Safety".

Improvement is an ongoing process and will, in the foreseeable future, for sure lead to an update of the current certification system.

3. Relevance

Relevance of credits and criteria covered by the system are of the highest importance to ensure “fitness for purpose” and progress in responsible sourcing practices.

The topics covered by the certification system - i.e. prerequisites, management systems, environmental, social and economic topics, as well as the supply chain - were consequently identified and recently adjusted with the support of a broad range of stakeholders (see above “2. Continuous Improvement”):

- Amongst the environmental key-topics identified are the reduction of CO₂ emissions, energy and water consumption, recycling and the use of secondary materials. In the supply chain, i.e. the production of cement and aggregates, biodiversity was identified as another important topic to be carefully considered.
- Amongst the social key-topics identified are the relations with the local community, occupational health and safety, and labor practices.
- In the field of economics, local economy, ethical business and innovation were identified as particularly important.

The CSC system allows local adaptations to ensure local applicability.

4. Rigour

The system focuses on topics relevant for responsible sourcing. All evidence used for certification first needs to be uploaded in the CSC assessment tool, the so-called “CSC Toolbox”. In a second step, the uploaded evidence is assessed and validated by an independent CB before issuing the certificate.

To ensure a rigorous process:

- The toolbox provides a clear and comprehensive overview on the performance level claimed by the applicant, the evidence submitted and the achievement level validated by the CB.
- Certification always includes a number of representative onsite audits performed by the CB assigned with the certification process.
- All CBs are CSC accredited, and their work is fully in line with ISO 17021 and/or ISO 17065.
- A high level overview on the plant’s sustainability performance is visible on the respective publicly available certificate.

Once a certificate is issued, it is valid for 3 years. The full certification process needs to be performed before the end of the 3 years validity period.

The CBs’ annual progress report feeds back into the update of the certification system and ensures measurable progress towards the CSC’s sustainability objectives.

5. Engagement

The system was developed and updated in a collaborative approach with the involvement from internal stakeholders - i.e. enterprises, industry associations and certification bodies - and external stakeholders - i.e. civil society organizations (CSOs), labor organizations, green building councils and academics (see “Acknowledgements”).

Continuous engagement in particular with external stakeholders is ensured by the organization’s governance: The CSC Advisory Committee is dedicated to continuously stay in dialogue with this group of stakeholders. Furthermore, a number of seats on the Executive Committee is specifically reserved for CSOs. Finally, a dedicated Grievance Management Procedure was implemented to settle complaints and appeals raised by stakeholders against decisions, performances or any other issues within the CSC certification system (see “Grievance Procedure”).

6. Impartiality

The CSC has a broad range of internal stakeholders, namely enterprises, industry associations, certification bodies.

Impartiality is ensured by the organization's Governance, namely

- A General Assembly with equal voting rights for all members
- The setup of the Executive Committee that ensures appropriate representation of all internal stakeholders
- The CSC Advisory Committee providing the direct voice of social and environmental stakeholders organizations
- The dedicated Grievance Management Procedure (see "Grievance Procedure").

7. **Transparency** and

8. **Accessibility**

All relevant information regarding the CSC, its Governance and the certification system can be accessed via the CSC's homepage: <https://concretesustainabilitycouncil.com/>

9. **Truthfulness**

CSC intends to secure truthfulness, hence confidence into products from CSC certified plants via a framework of dedicated measures:

- CSC formally requests that claims and communications relating to CSC certification and the use of the Logo are in line with the respective CSC guidance document (see "CSC Logo User Guide").
- A dedicated procedure is in place to report false claims, false use of the CSC trademark and the logo (see "Use of the CSC Logo").
- CSC regularly checks the use of the CSC logo and trademark, e.g. via internet spot-checks.
- CSC reserves the right to take legal action against any false/deceptive claims including all misuse of the CSC logo.

10. **Efficiency**

CSC is aligned with ISO standards, namely ISO 14001, ISO 18001, ISO 9001, ISO 26000 and other standards. This makes the certification process efficient for companies, who are already following those standards. CSC continuously seeks the dialogue with Green Building and Infrastructure Labels. Recognition has been achieved within BREEAM, DGNB and Envision (see "Recognition by other Certification Systems) and is an important driver to create value for CSC customers. Recognition in such systems can become an important success factor for the CSC through the growing number of CSC certifications, such as recently demonstrated in the Netherlands and in Germany.

Therefore, local promotion of the CSC certification system towards stakeholders other than the concrete sector and its supply chain is key to implementing the CSC system throughout the construction value chain. Local promotion is secured through local "system ownership" via Regional System Operators who proactively engage towards green building councils and public authorities.

3.2 Recognition by Other Certification Systems

Introduction

To encourage responsible sourcing in construction, different green building and infrastructure certification systems award credits for the use of product labels. For this purpose BREEAM, DGNB and Envision have developed specific recognition processes.

As a global initiative running a responsible sourcing certification system for concrete, cement and aggregate, the CSC system provides insight about to what level a company is operating in an environmentally, socially and economically responsible way. The CSC certification covers raw materials, their source or provenance, the concrete manufacturing process and a range of social and environmental matters. CSC certified companies demonstrate responsible sourcing and the level of sustainability for their concrete including its constituents.

The CSC product label received recognition from BREEAM, DGNB, LEED and Envision, which underscores the robustness and credibility of the CSC certification system and at the same time, provides additional value for CSC certificate holders.

BREEAM

The BREEAM system awards credits for responsibly sourced construction products (typically under the Mat 03 “responsible sourcing of materials” issue) to encourage responsible product specification and procurement in construction. To score in these credits, applicable specified products (as listed in the relevant technical manual) must be covered by an Environmental Management System (EMS) or a responsible sourcing certification scheme (RSCS) recognized by BREEAM.

CSC Bronze, Silver, Gold and Platinum are recognized at score level, 4, 5, 6 and 7, respectively. Score 7 is the best score any sourced material can obtain in the BREEAM certification. Detailed information can be found [here](#).

DGNB (German Sustainable Building Council)

The DGNB recognizes CSC Silver, Gold and Platinum certified concrete in the criterion “[ENV1.3 Sustainable resource extraction](#)”, quality level 1.2 “certified sustainable resource extraction of a part of the value chain”. Detailed information can be found [here](#).

LEED (United States Green Building Council)

LEED recognizes CSC-certification as one of the verified Company- and Product Standards in the “Social Equity within the Supply Chain” Pilot Credit.

The intent of this credit is to create more equitable, healthier environments for those affected by and involved in the production of materials and products, including the stages of raw materials extraction, processing, manufacturing, and assembly of components and products.

For details regarding the „Social Equity within the Supply Chain” Pilot Credit see [here](#).

Envision

Envision is a US infrastructure certification system developed by the Institute for Sustainable Infrastructure (ISI), located in Washington DC.

The new [Envision Version 3](#) document is including CSC as an example of sustainable certification that would meet the requirements for their procurement credit. This credit RA 1.2 “Support sustainable Procurement Practices” will have the requirement “Third-party verified sustainability program.”

3.3 Code Review Process

The CSC Technical Manual shall be annually reviewed in order to guarantee that it always reflects the views of all stakeholders to the extent possible.

The CSC framework foresees two mechanisms that are very different in form and content:

- **Continuous Improvement** is, as the name implies, a constant process to fine-tune the existing Technical Manual. The changes implemented in this process are relatively minor and do not affect the overall structure of the manual or of individual credits.
- **A formal Code Review** is a systematic analysis and further development of the whole Technical Manual that will typically have impacts on the overall structure of the manual as well as the structure and content of

The following table summarizes the characteristics of the two processes.

	Continuous Improvement	Code Review
Scope	Minor changes (e.g. Alternative evidence) or clarifications to individual credits	Systematic review of the whole Technical Manual
Frequency	Quarterly (if required)	typically every 3 -6 years
Documentation	In Annex to Technical Manual	New Technical Manual
Stakeholder consultation	not required	Mandatory
Process	Informal	Formal process
Trigger	Any need for improvement detected	Regular assessment by Technical Committee
Responsible parties		
Development of proposals	Every stakeholder	Technical Committee under the lead of its Chair
Approval of proposals	ExCo	ExCo

This goal of this process is to amend minor topics in the Technical Manual, including but not restricted to alternative evidence, regional adaptation, clarifications. There is no formal process for proposals; proposals can be submitted by the Technical Committee or any stakeholder at any time and will be discussed and decided (in original or amended version) by the CSC Executive Committee at one of its next sessions.

Changes stemming from the Continuous Improvement process are published quarterly in the Annex to the Technical Manual.

Formal Code Review

The goal of this process is a systematic review of the Technical Manual in its entirety to ensure the structure and content are regularly updated to meet changing requirements (etc.).

The Technical Committee (TC) shall discuss at least once every year whether the existing Technical Manual is still fit for purpose. In its assessment the Technical Committee shall consider, among others, stakeholder expectations, scientific progress, technical developments, changing regulatory frameworks, and changes in green building labels. However, the TC should also consider the need to maintain a certain continuity to establish the CSC system as a predictable framework in the market. It is targeted to carry out the formal code review every three to six years.

If the Technical Committee finds that an update is appropriate it formally asks the Executive Committee to launch the Code Review process. The Executive Committee shall approve or reject the process.

The Code Review can be also triggered directly by a decision by the ExCo.

Once a decision for a formal Code Review has been taken the Technical Committee will draft a work plan, including timelines and responsibilities, and present it to the ExCo. After approval by the ExCo the Technical Committee will execute the work plan, regularly informing the ExCo about progress made.

An integral part of every formal code review process is an effective consultation of stakeholders. Representation of a wide range of key stakeholder groups shall be ensured, and key documents (such as draft versions of the technical manual) shall be publicly shared by the CSC.

In order to ensure an efficient process, it is recommended to base the work plan including stakeholder consultation on the experience from earlier Code Reviews.

The new Technical Manual has to be approved by the ExCo. Once approved, the Technical Manual shall be published on the CSC website, together with a clear timeline for its introduction, including a reasonable transition period for projects registered before the new Technical Manual comes into force.

3.4 Traceability Framework

Traceability is a key concern of the CSC certification system for responsibly sourced concrete and the supply chain and is addressed via a dedicated framework:

The dedicated pre-requisite “P5 Traced Materials” defines the minimum percentage of materials that must come from traceable sources

- Certification at CSC Bronze/Silver is only possible if $\geq 90\%$ of the materials come from traceable sources
- Certification at CSC Gold/Platinum is only possible if $\geq 98\%$ of the materials come from traceable sources

Consequently, no CSC certification is possible if less than 90% of the materials come from traceable sources.

CSC certification of concrete plants creates a certification pull into the supply chain

- 40% of the CSC score available for concrete plants can only be earned by supplying cement, aggregate and cementitious materials from CSC certified producers
- Certification at CSC Gold/Platinum is not possible without moving towards CSC certified producers

A dedicated credit “M1 Sustainable Purchasing” awards implementing a comprehensive responsible Chain of Custody system

- CSC certification awards implementing a purchasing policy, conducting supplier assessments, monitoring the performance of suppliers, training on and promoting responsible sourcing, and implementing responsible sourcing as a criterion in the procurement process

Having management systems in place is a mandatory criterion for higher CSC certification levels

- All concrete plants and material suppliers aiming at CSC certification level “Silver” and above must have an environmental, quality and health and safety management system in place (see “M2 Environmental Management”, “M3 Quality Management” and “M4 Health and Safety Management”)
- All concrete plants and material suppliers aiming at CSC certification level “Platinum” must have a certified quality and health and safety management system in place (see “M3 Quality Management” and “M4 Health and Safety Management”)
- In all other cases having certified management systems in place is additionally rewarded



3.5 Fees

Fees

The CSC license fees can be found under this [link](#)

3.6 CSI Activities Transferred to GCCA

The work carried out by the Cement Sustainability Initiative (CSI) was officially transferred from the World Business Council for Sustainable Development (WBCSD) to the Global Cement & Concrete Association (GCCA) as of 1 January 2019.

About the GCCA:

Launched in January 2018, the Global Cement and Concrete Association (GCCA) is dedicated to developing and strengthening the sector's contribution to sustainable construction. The GCCA aims to foster innovation throughout the construction value chain in collaboration with industry associations as well as architects, engineers and innovators. In this way, the association demonstrates how concrete solutions can meet global construction challenges and sustainable development goals while showcasing responsible industrial leadership in the manufacture and use of cement and concrete. The GCCA is headquartered in London, United Kingdom. It complements and supports the work done by associations at national and regional level.

CSI Guidelines:

The CSC technical manual refers to the CSI guidelines in several places. Step by step, these guidelines will be replaced by equivalent GCCA guidelines. For the time being, the CSC will make reference to new GCCA guidelines as needed in the technical manual's Annex document. An update on relevant GCCA guidelines will be part of a technical manual's future major update.

The CSI archived information still can be found here: <https://www.wbcasd.org/Sector-Projects/Cement-Sustainability-Initiative>

The available GCCA guidelines can be found here:

<https://gccassociation.org/sustainability-innovation/sustainability-charter-and-guidelines/>

4 Technical Manual

Technical Manual

This chapter describes in detail the CSC criteria and their required evidence

Depending on the object of certification, specific CSC certification systems may apply. The following CSC certification systems are applicable:

CSC Concrete certificates

Concrete plants

Concrete plants are permanent plants to produce ready-mix concrete or precast concrete elements out of cement, aggregates, water and other mineral components and admixtures.

Mobile concrete plants

Mobile concrete plants are installed for specific projects and in proximity to the respective construction sites. Once a project is done, the mobile plant will typically be (re)moved. Thus, at the exception from its changing location, a mobile plant operates like a normal concrete plant.

If a mobile concrete plant is the object of certification, the concrete system must be selected. All criteria at the exception of E2.02 "Responsible Land Use" apply. E2.02 is automatically achieved for mobile concrete plants (points achieved by default).

Dry mortar plants

Dry mortar can be certified using the concrete system, provided that the binder of the dry mortar is based on cement.

R-Module

Optional module for recycling concrete manufactured in a CSC silver or higher certified concrete plant. A separate technical manual applies.

CSC Supplier certificates

Cement plants

Cement plants are integrated production facilities with a clinker line to produce cement out of limestone and other mineral components. The key components of a cement production process are quarrying, raw material pre-processing, clinker production, grinding, blending and logistics.

Cement grinding stations

Cement production in cement grinding plants is performed by co-grinding clinker and gypsum in dedicated mills (e.g. ball mills, vertical roller mills), and by possibly using further cementitious materials such as slag, fly ash or limestone. Cement grinding plants are not equipped with a kiln and their cement production consequently depends on (external) clinker supply. Most of the environmental impact of cement production is related to clinker production (e.g. quarrying, emissions) and it is consequently necessary for cement grinding plants undergoing CSC certification to prove that the processed clinker they use is produced in a responsible manner. If a grinding station is the object of certification, the "cement grinding" system must be selected. A separate technical manual applies.

Aggregates plants

Aggregates plants are quarrying and processing various types of gravel, coarse aggregates and sand.

Recycled aggregates plants

Recycling plants are using secondary raw materials for producing sand and aggregates. Main material sources include construction and demolition waste (C&DW), concrete rubble and hardened returned concrete. The processing of these materials into sand and aggregates is similar to hardrock and includes crushing, sieving and possibly other process steps such as sorting and washing. Unlike traditional aggregate producers, recycling plants do not maintain a quarry. If

a recycled aggregate producer is the object of certification, the "recycled aggregate" system must be selected. A separate technical manual applies.

Mobile recycling plants

Mobile recycling plants are installed for specific projects and in proximity to the respective demolition sites. Once a project is done, the mobile plant will typically be (re)moved. Thus, at the exception from its changing location, a mobile plant operates like a normal recycled aggregates plant.

If a mobile recycling plant is the object of certification, the separate recycled aggregate system must be selected. All criteria at the exception of E2.02 "Responsible Land Use" apply. E2.02 is automatically achieved for mobile recycling plants (points achieved by default).

Aggregate Crusher plants

Aggregate crusher plants do not own their own quarry or gravel pit and their aggregate production consequently depends on (external) raw aggregate supply.

Some of the relevant environmental impacts of aggregate production is related to raw aggregate production (e.g. quarrying,) and it is consequently necessary for aggregate crusher plants undergoing CSC certification to prove that the raw aggregate they use is quarried in a responsible manner.

35% of an aggregate crusher plant's total score comes from the supply chain credit "C4 Raw Aggregate Supplier". Only CSC-certified aggregate suppliers can contribute to the achievement of criterion "C4 Raw Aggregate Supplier". A separate technical manual applies.

Prerequisites

P1 - Ethical and Legal Compliance

Aim

To ensure compliance with all applicable legislation.

This credit is a prerequisite for certification. No points can be achieved.

Total points achievable for this credit

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

P1.01 Legal Compliance

Criterion Type

Company

Points achievable for this criterion

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete	x	x	x	x
Cement	x	x	x	x
Aggregate	x	x	x	x

The organization must declare that all efforts have been made that may reasonably be expected of the organization in order to ensure that all of its operations comply with all applicable legal legislation, requirements, regulations, laws and by-laws.

Required evidence

Written declaration by senior management satisfying the assessment criteria.

P1.02 Anti Corruption

Criterion Type

Company

Points achievable for this criterion

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete	x	x	x	x
Cement	x	x	x	x
Aggregate	x	x	x	x

The organization must declare that all efforts have been made that may reasonably be expected of the organization and its suppliers in order to prevent corruption.

The organization expects its suppliers to adhere to the highest standard of moral and ethical conduct, to respect local laws and not engage in any form of corrupt practices such as extortion, fraud, or bribery.

Required evidence

1A: Written declaration by senior management satisfying the assessment criteria.

AND

1B: Evidence that the Company has a Supplier Code of Conduct in place.

2A: Company specific guidelines, directives, policies addressing the risk of corruption.

OR

2B: B2 Ethical Business 'B2.01 Ethical risk assessment' or B2.02 'Policy or code for ethical business' is achieved.



P2 - Human Rights

Aim

To ensure compliance with human rights. This credit is a prerequisite for certification. No points can be achieved.

Total points achievable for this credit		
Concrete: 0 points	Cement: 0 points	Aggregate: 0 points

P2.01 Human rights

Criterion Type

Company

Points achievable for this criterion

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete	x	x	x	x
Cement	x	x	x	x
Aggregate	x	x	x	x

The organization must declare that all efforts have been made that may reasonably be expected of the organization in order to ensure that all of its operations comply with the Universal Declaration of Human Rights (UDHR).

Topics that must be addressed in the declaration are:

- Human rights risk situations;
- Avoidance of complicity;
- Resolving grievances;
- Discrimination, vulnerable groups and equal opportunity for women and men in the world of work (ILO convention 100, 111);
- Civil and political rights;
- Economic, social and cultural rights;
- Fundamental principles and rights at work (ILO convention 87, 98, appendix D)
- Child labor (ILO convention 138 and 182)
- Forced labor (ILO convention 29, 105, 203)

Required evidence

Written declaration by senior management satisfying the requirements

OR

an SA8000 certificate covering the scope of this certification, not older than three years

OR

publicly available company commitment to follow the OECD guidelines for multinational enterprises.

P2.02 Fair wages

Criterion Type

Company

Points achievable for this criterion

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete	x	x	x	x
Cement	x	x	x	x
Aggregate	x	x	x	x

In order to address the topics mentioned in ILO Convention 131 wages and salaries paid by the organization must meet the following requirements:

- Wage and salary rates
 - Wage and salary rates in all circumstances meet or exceed legal minimum rates, where such rates exist.
 - Wherever applicable, wage and salary rates for permanent and agency workers meet or exceed: i. minimum concrete, cement or aggregates industry, respectively, minimum standards; or ii. other recognized industry wage agreements; or iii. living wages if these are higher than legal minimum wages.
 - When no minimum wage levels exist, wages are established through culturally appropriate engagement with workers and/or formal and informal workers organizations.
- Wages and salaries are paid on time.

Required evidence

Written declaration by senior management satisfying the assessment criteria.

OR

publicly available company commitment to follow the OECD guidelines for multinational enterprises.

P2.03 Safety Procedures

Criterion Type

Company

Points achievable for this criterion

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete	x	x	x	x
Cement	x	x	x	x
Aggregate	x	x	x	x

The company has documented health and safety procedures in place.

Required evidence

Validation by the auditor that the company has documented health and safety procedures in place.

OR

Criterion M4.01 is met.

P3 - Indigenous Peoples Rights

Aim

To ensure that the rights and way of life of indigenous peoples potentially affected are respected. This credit is a prerequisite for certification of mining operations which have started after December 31st, 2019. No points can be achieved.

Total points achievable for this credit

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

P3.01 Assessment of potential impact on indigenous people

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement	x	x	x	x
Aggregate	x	x	x	x

An assessment is done of whether indigenous people are potentially affected by the quarry operation. See the annex for the list of countries and / or regions that are considered free of potential impacts on indigenous people. Sites within these countries / regions are not required to provide an individual assessment.

* prerequisite if quarry operations within scope of certification

Required evidence

Copy of the assessment

OR

Evidence (map, address) that the plant is within one of the countries / regions listed in the annex

P3.02 Free, prior and informed consent

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement	x	x	x	x
Aggregate	x	x	x	x

If the assessment in P3.01 indicates that indigenous peoples are potentially affected, a participation process respecting the principle of free, prior and informed consent (FPIC) has to be implemented in the development of the activity, following for example the Conservation International Guidelines on FPIC or a similar framework (see the annex).

*: prerequisite only if quarry operations within scope of certification

Required evidence

Documentation of the process according FPIC or similar (see the annex) and its outcomes

OR

Reference to evidence for P3.01 (in case no indigenous people are potentially affected)

P4 - Environmental and Social Impact

Aim

To ensure that environmental and social impacts have been duly considered before the implementation of the activity.

This credit is a prerequisite for certification of extraction operations or major expansions which have started after December 31st, 2019. No points can be achieved.

Total points achievable for this credit

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

P4.01 Environmental and social impact assessment (ESIA)

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement	x	x	x	x
Aggregate	x	x	x	x

An ESIA was conducted before the extraction operation began. The ESIA shall follow one of the frameworks referenced in the Annex. The ESIA shall also identify whether the site is in a karst region, and in such case should also address the biodiversity issues related to karst regions.

* prerequisite for cement only if quarry operations within scope of certification

Required evidence

Copy of the ESIA

P5 - Traced Materials

Aim

To ensure that all materials are from traceable sources. This credit is a prerequisite for certification. No points can be achieved for this credit.

Total points achievable for this credit

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

P5.01 Traceability of materials

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete	x	x	x	x
Cement	x	x	x	x
Aggregate				

The plant must demonstrate (via Environmental Management System or similar) that solid constituent materials (by mass) are from traceable sources.

The materials of all tier one suppliers have to be included in the scope.

CSC Bronze/Silver: $\geq 90\%$ of materials must come from traceable sources

CSC Gold/Platinum: $\geq 98\%$ of materials must come from traceable sources

Required evidence

Exemplary material list giving an overview on the suppliers

AND

Written declaration by senior management satisfying the assessment criteria.

Management

M1 - Sustainable Purchasing

Aim

To ensure an embedded long-term focus on and implementation of responsible sourcing.

Total points achievable for this credit

Concrete: 14 points

Cement: 14 points

Aggregate: 14 points

M1.01 Purchasing Policy

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete			x	x
Cement			x	x
Aggregate			x	x

The company has a purchasing policy covering social and environmental aspects. The policy is valid & operational. In case of continuous non-compliance with sustainability related aspects, the policy mentions performance improvement requirements and/or that business relations with suppliers can consequently be terminated. The purchasing policy has been approved by the management responsible for the scope of this assessment.

Required evidence

A copy of the purchasing policy, with reference to social and environmental aspects including "performance improvement requirement" clause and/or a "business termination" clause and evidence that senior management has formally approved the policy.

M1.02 Supplier assessment

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points **Cement:** 2 points **Aggregate:** 2 points

The company has a process of assessing its main suppliers regarding the social, and environmental aspects in the sense of this system (by online tool/on site audit or similar).

Required evidence

Documentation that the process has taken place (e.g. minutes, assessment results, used tools or similar).

M1.03 Monitoring performance of suppliers

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points **Cement:** 2 points **Aggregate:** 2 points

The company can provide evidence that the performance of its suppliers regarding the social and environmental aspects of this system are being maintained or improving.

Required evidence

Documentation of the results of an assessment process (e.g. minutes, assessment results, used tools or similar).

M1.04 Training on Responsible Sourcing

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points **Cement:** 2 points **Aggregate:** 2 points

The company applies learning by and development of its employees to cover the principles of responsible sourcing in introduction programs and in all relevant professional and functional training.

Required evidence

Evidence that the principles of responsible sourcing (e.g. content of criteria M1.01 to M1.03) are communicated to relevant employees.

M1.05 Promotion of Responsible Sourcing

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points **Cement:** 2 points **Aggregate:** 2 points

The company promotes, where applicable, responsible sourcing in public communications, such as websites and (financial) reporting.

Required evidence

Evidence of promotion, for example, website links and copies of reports, publications, etc.

M1.06 Responsible sourcing as a criterion in the procurement process

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points **Cement:** 2 points **Aggregate:** 2 points

The company includes responsible sourcing as a criterion in its procurement process.

Required evidence

Evidence of practical implementation of the purchasing policy/plan

M1.07 Sample check

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points **Cement:** 2 points **Aggregate:** 2 points

Random sample by the auditor, defined by the auditor, on the site(s) visited, to check if one current material available at the location matches with the material list in the administration and that the material can be traced back to its origin. In case of a multiple site assessment, the criteria is awarded for all plants in the scope of assessment.

Required evidence

Statement from the auditor/assessor that constituent check has been performed and that it matches with the constituent list.

M2 - Environmental Management

Aim

To promote the use of an environmental management system (EMS in the supply chain).

Total points achievable for this credit

Concrete: 4 points

Cement: 4 points

Aggregate: 4 points

M2.01 Environmental management system (EMS)

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The company has a documented EMS in place. The EMS shall include the relevant scope: the key processes for raw material extraction and primary material production and/or production of concrete.

Required evidence

Validation by the auditor that the company has a documented EMS (see the Annex).

M2.02 Certified environmental management system (EMS)

Criterion Type

Company

Points achievable for this criterion

Concrete: 3 points

Cement: 3 points

Aggregate: 3 points

The company has a certified EMS in place (see the annex).

Required evidence

Copy of the valid EMS certificate.

M3 - Quality Management

Aim

To promote the use of a quality management system in the supply chain.

Total points achievable for this credit

Concrete: 4 points

Cement: 4 points

Aggregate: 4 points

M3.01 Quality management system (QMS)

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The company has a documented quality management system in place.

Required evidence

Validation by the auditor that the company has a documented quality management system.

M3.02 Certified Quality management system (QMS)

Criterion Type

Company

Points achievable for this criterion

Concrete: 3 points

Cement: 3 points

Aggregate: 3 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				2 points
Cement				2 points
Aggregate				2 points

Score at least 2 points to obtain Platinum.

A certified quality management system is in place (see the annex).

Required evidence

Copy of the valid QMS certificate.

M4 - Health & Safety Management

Aim

To promote the use of health and safety management systems.

Total points achievable for this credit

Concrete: 4 points

Cement: 4 points

Aggregate: 4 points

M4.01 Health and safety management system

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The company has a health and safety management system in place.

Required evidence

Validation by the auditor that the company has a documented health and safety management system

M4.02 Certified health and safety management system

Criterion Type

Company

Points achievable for this criterion

Concrete: 3 points

Cement: 3 points

Aggregate: 3 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				2 points
Cement				2 points
Aggregate				2 points

Score at least 2 points to obtain Platinum.

The company has a certified health and safety management system in place (see the annex).

Required evidence

Copy of the valid Health & Safety certificate

M5 - Benchmarking

Aim

Publish actual performance data.

Total points achievable for this credit

Concrete: 7 points (+1EP)

Cement: 7 points (+1EP)

Aggregate: 7 points (+1EP)

M5.01 Publishing annual performance data (KPIs)

Criterion Type

Company

Points achievable for this criterion

Concrete: 5 points

Cement: 5 points

Aggregate: 5 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete			x	x
Cement			x	x
Aggregate				

The company publishes annual performance data (KPIs) on a regular basis by publishing an annual sustainability report or by joining an industry benchmark.

The performance data must cover the following relevant topics with a minimum of five of the listed topics (if the company offers concrete or aggregates, at least one indicator must also address concrete, respectively aggregates):

- Use of secondary materials;
- Use of fossil fuels;
- Production of renewable energy/ % of renewable energy;
- Carbon dioxide emissions;
- Clinker content (if applicable);
- % of transport (raw material and or to client) within total emissions;
- Use of potable water;
- Incidents/injuries/accidents;
- Employee health & well-being.

Required evidence

Copy of / link to the latest sustainability report (not older than 1 1/2 years) available upon certification



M5.02 Externally verified KPIs

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points **Cement:** 2 points **Aggregate:** 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete			x	x
Cement			x	x
Aggregate				

The KPIs are externally verified (see the annex).

Required evidence

Evidence of the publicly available external verification

OR

Evidence that the company has been audited against the CSI/GCCA Charter within the last five years.

M5.03 (EP) Participation to a benchmarking study

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Exemplary Performance criteria:

The company participates in the region of certification in an annual benchmark that covers at least 20% of the market, **see the annex**. The performance data must cover the following relevant topics with a minimum of five of the listed topics:

- Use of secondary materials;
- Use of fossil fuels;
- Production of renewable energy/ % of renewable energy;
- Carbon dioxide emissions;
- Clinker content (if applicable)
- % of transport (raw material and or to client) within total emissions;
- Use of potable water;
- Incidents/injuries/accidents;
- Employee health & well-being.

Required evidence

Evidence of participation in a benchmark, for accepted schemes see the annex.

Environmental

E1 - Life Cycle Impact

Aim

Provide transparency and encourage the use of products and materials with an improved life-cycle impact.

Total points achievable for this credit

Concrete: 6 points (+1EP)

Cement: 6 points (+1EP)

Aggregate: 6 points (+1EP)

E1.01 Sectoral environmental product declaration

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				x
Cement			x	x
Aggregate				x

The company contributes to the generation of sectoral Environmental Product Declarations (EPD) in the region of the assessed plant(s) for their products by providing representative average LCA data. The EPD's are conforming to national EPD standards.

Required evidence

Evidence confirming that the company has contributed - by providing data - to the generation of at least one industry-wide concrete/Cement/Aggregate EPD in the country where the plant requesting certification is located. The EPD needs to be either valid or in the preparation phase. The requested evidence needs to be issued or confirmed by the sectoral EPD owner or coordinator.

OR

Confirmation by the local sector association that no EPD is available or in the preparation phase in the country where the plant requesting certification is located.

OR

E1.03 is fulfilled.

E1.02 Implementation of life cycle assessment (LCA)

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The company performs company-specific LCA's.

Required evidence

Subscription and demonstrated use of the GCCA Industry EPD Tool.

OR

Subscription or ownership and use of other LCA-tools (see the annex).

OR

E1.03 is fulfilled.

E1.03 Release of environmental product declarations (EPDs)

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

The company has released at least one EPD. The EPD follows international or national standards and is third party verified (see the annex).

Required evidence

Electronic copy of the EPD

OR

Publically available internet link to the EPD.

E1.04 (EP) Reporting of product specific carbon emissions

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Exemplary Performance credit:

The company offers product specific carbon calculations to customers on request.

Required evidence

Exemplary product carbon calculation provided to customer

OR

Product specific EPD

OR

Publically available offer of product specific carbon calculation (e.g. brochure, mailing, internet page).

E2 - Land Use

Aim

To ensure land is used in a rightful way, that land-use conflicts are minimized, and that the land is reclaimed at the end of use in accordance with the planning consent or, if there are no requirements in the planning consent, reclaimed in a way that meets the approval of the local community.

Total points achievable for this credit

Concrete: 5 points

Cement: 5 points

Aggregate: 5 points

E2.01 Policy to avoid globally or nationally important sites

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Companies have a publicly available policy that prohibits operations in sites of potential land use conflict; the definition of these areas should follow accepted frameworks (see the annex).

Required evidence

Copy of the policy and proof of publication (e.g. link).

E2.02 Responsible land use

Criterion Type

Plant

Points achievable for this criterion

Concrete: 3 points

Cement: 3 points

Aggregate: 3 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The plant ensures the responsible use of land.

Required evidence

Concrete:

Site layout showing the locations of the main plant installations including roadways, stormwater drains, retention basins, etc. The layout plan includes an explanation as to why/how the site layout enables using the land in a particularly efficient way (e.g. biodiversity, efficient traffic flow, stormwater management, efficient storage / processing of materials).

Cement / Aggregates:

A quarry development plan is in place which includes the extraction plan and reclamation plan (see the annex).

AND

Evidence that progressive reclamation is pursued where reasonably practical and permitted under local requirements (see the annex).

E2.03 Protection from pollution

Criterion Type

Plant

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The plant has facilities where chemicals (including fuels) are stored in conditions where any spillage, including accidental, does not contaminate the land.

Required evidence

Photographs of the storage facilities for chemicals and fuels

OR

The plant is ISO 14001 certified.

OR

The criterion is awarded by default if no chemicals and fuels are used and stored on the site.

E3 - Energy & Climate

Aim

To promote the responsible use of energy and the reduction of Greenhouse Gas (GHG) emissions.

Total points achievable for this credit

Concrete: 22 points

Cement: 40 points

Aggregate: 22 points

E3.01 Climate policy

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete			x	x
Cement		x	x	x
Aggregate				x

The company is committed to measuring, reporting and reducing its GHG emissions.

Required evidence

Publically available policy / commitment to measuring, reporting and reducing the company's greenhouse gas emissions.

OR

Membership to a sector organization (e.g. GCCA) that is publicly committed to measuring, reporting and reducing GHG emissions, and were committing to these principles is required to join the organization.

OR (for aggregates only)

A publically available policy / commitment to measuring, reporting and reducing the company's energy consumption.

Evidence for the commitment to measure GHG emissions is automatically covered via a reporting commitment.

E3.02 Monitoring of GHG emissions

Criterion Type

Company

Points achievable for this criterion

Concrete: 3 points

Cement: 3 points

Aggregate: 3 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement		x	x	x
Aggregate				

The company monitors its relevant GHG emissions.

Concrete: GHG emissions relating to own operations and concrete delivery.

Cement: GHG emissions as defined in the CSI/GCCA protocol or equivalent (see the annex).

Aggregates: GHG emissions relating to own operations and aggregate delivery.

Required evidence

Extract of the monitoring results and the related GHG emission calculations

OR (for cement and concrete only)

Proof that the Company was successfully audited against the CSI/GCCA charter within the last five years

E3.03 Public reporting of monitoring results

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement		x	x	x
Aggregate				

The company reports monitoring results on a yearly basis.

Required evidence

Copy of the latest publication / link to the latest publication (not older than 1 1/2 years) available upon certification.

OR (for cement and concrete only)

Proof that the Company was successfully audited against the CSI/GCCA charter within the last five years.

E3.04 Externally verified reporting of GHG emissions

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement		x	x	x
Aggregate				

The GHG reporting has been externally verified according to accepted standards (see the annex) and to at least a level of limited assurance.

Required evidence

Copy of the verification statement

E3.05 Reporting to GNR database

Criterion Type

Company

Points achievable for this criterion

Concrete: 0 points

Cement: 1 point

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement		x	x	x
Aggregate				

The company reports on a yearly basis to the GCCA's Getting the Numbers Right (GNR) database for all its cement plants where this is legally possible. If a company controls any cement plant where reporting to the GNR database is not legally possible, this criterion does not apply for the respective cement plant(s).

Required evidence

Listed on a positive list from PwC (non-GCCA member).

OR

Proof that the Company was successfully audited against the CSI/GCCA charter within the last five years.

E3.06 CO2 emission reduction target

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement		x	x	x
Aggregate				

The company has a public CO2 reduction target.

Required evidence

Publically available CO2 reduction target.

Cement: The criterion is automatically fulfilled if the company has a science based CO2 emission reduction target according to E3.07.

E3.07 Science based CO2 emission reduction target

Criterion Type

Company

Points achievable for this criterion

Concrete: 0 points **Cement:** 6 points **Aggregate:** 0 points

The company has a public science based CO2 reduction target with a time horizon until at least 2030.

Required evidence

Evidence that the target has been recognized as science based by one of the organizations named in the annex.

E3.08 Energy reduction potentials

Criterion Type

Plant

Points achievable for this criterion

Concrete: 2 points **Cement:** 2 points **Aggregate:** 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement				
Aggregate				

The plant has identified potential actions to reduce its energy consumption.

Required evidence

Evidence of the site energy audit report or own analysis of energy consumption and energy reduction potentials.

OR

ISO 50001 certificate

E3.09 Achievement of CO2 emission reduction target

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point **Cement:** 6 points **Aggregate:** 1 point

The company is on track to meet its CO2 reduction target according to E3.06 and E3.07, respectively.

Cement:

1 point for target according to E3.06

6 points for target according to E3.07

Required evidence

Externally verified proof (e.g. externally audited annual report) that the company is on track to achieve its CO2 reduction target (= in line with published reduction path).

E3.10 Implementation of energy reduction potentials

Criterion Type

Plant

Points achievable for this criterion

Concrete: 3 points **Cement:** 3 points **Aggregate:** 3 points

The plant has implemented at least one of the energy reduction potentials identified in E3.08

Required evidence

Proof of implementation including an evaluation of the (expected) energy savings.

E3.11 Energy saving awareness creation

Criterion Type

Plant

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

Relevant workers have been made aware of

- the biggest drivers for energy (thermal/electricity) consumption
- and how they can contribute to reducing energy consumption.

Required evidence

Copy of relevant e-mail, notice or other information channel.

E3.12 CO2 Emissions

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 6 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement				2 points
Aggregate				

Cement: Score at least 2 points to obtain Platinum.

CO2 net emissions according to GCCA guidelines (scope 1 emissions) are kept at a minimum level.

E = 3: CO2 net emissions \leq 550 kg/t of cementitious produced

E = 2: CO2 net emissions \leq 600 kg/t of cementitious produced

E = 1: CO2 net emissions \leq 650 kg/t of cementitious produced

$P = 2 \times E$

P = Points achieved

E = Performance level

Required evidence

Extract from reporting to GNR

OR

Reporting of CO2 net emissions per ton of cementitious produced which is externally verified (see the annex)

E3.13 Use of renewable electrical energy

Criterion Type

Plant

Points achievable for this criterion

Concrete: 5 points

Cement: 5 points

Aggregate: 5 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				1 point
Cement				1 point
Aggregate				1 point

Score at least 1 point to obtain Platinum.

The plant uses renewable electrical energy.

P = 1 if share of renewable electrical energy $\geq 20\%$

P = 2 if share of renewable electrical energy $\geq 40\%$

P = 3 if share of renewable electrical energy $\geq 60\%$

P = 4 if share of renewable electrical energy $\geq 80\%$

P = 5 if share of renewable electrical energy = 100%

Required evidence

Applicable national energy mix

OR

Company specific confirmation such as contract or invoice(s) specifying renewable energy (share)

E4 - Air Quality

Aim

To minimize emissions of air pollutants and particulate matter from exhaust gases.

Total points achievable for this credit

Concrete: 7 points

Cement: 34 points

Aggregate: 4 points

E4.01 Emission reduction targets

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 3 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement			x	x
Aggregate				

The company has a publicly declared target for the reduction of NO_x, SO_x and PM emissions.

Required evidence

Copy of the publicly available document showing the targets or link to website

OR

Proof that the company was successfully audited against the CSI/GCCA charter within the last five years.

E4.02 Monitoring and reporting of emissions

Criterion Type

Company

Points achievable for this criterion

Concrete: 0 points **Cement:** 3 points **Aggregate:** 0 points

The company monitors and reports air emissions in compliance with the GCCA Guidelines for Emissions Monitoring and Reporting in the Cement Industry.

Required evidence

Evidence that the company complies with the GCCA Guidelines

OR

Proof that the company was successfully audited against the CSI/GCCA charter within the last 5 years.

E4.03 Verification of emission reporting

Criterion Type

Company

Points achievable for this criterion

Concrete: 0 points **Cement:** 2 points **Aggregate:** 0 points

The emissions data have been externally verified according to accepted standards (see the annex) to at least the level of limited assurance.

Required evidence

Copy of the verification statement.

OR

If the plant is subject to a system of emissions monitoring (see the annex).

E4.04 NO_x emissions

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 6 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement			3 points	4 points
Aggregate				

Cement: Score at least 3 points to obtain Gold.

Cement: Score at least 4 points to obtain Platinum.

Kiln NO_x emissions are monitored and kept at a minimum level.

E = 1: NO_x emissions ≤ 800 mg/Nm³*)

E = 2: NO_x emissions ≤ 500 mg/Nm³*)

E = 3: NO_x emissions ≤ 200 mg/Nm³*)

*) daily average value, if continuously monitored

M = 2: NO_x emissions are continuously monitored

M = 1: NO_x emissions spot measurements are done at least once a year

$$P = E \times M$$

P = Points achieved

E = Emissions level

M = Monitoring level

Required evidence

Emissions protocol

E4.05 SO_x emissions

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 6 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement				2 points
Aggregate				

Cement: Score at least 2 points to obtain Platinum.

Kiln SO_x emissions are monitored and kept at a minimum level.

E = 1: SO_x emissions expressed as SO₂ ≤ 400 mg/Nm³*)

E = 2: SO_x emissions expressed as SO₂ ≤ 150 mg/Nm³*)

E = 3: SO_x emissions expressed as SO₂ ≤ 50 mg/Nm³*)

*) daily average value, if continuously monitored

M = 2: SO_x emissions are continuously monitored

M = 1: SO_x emissions spot measurements are done at least once a year

$P = E \times M$

P = Points achieved

E = Emissions level

M = Monitoring level

Required evidence

Emissions protocol

E4.06 Dust emissions

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 6 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement			3 points	4 points
Aggregate				

Cement: Score at least 3 points to obtain Gold.

Cement: Score at least 4 points to obtain Platinum.

Kiln dust emissions are monitored and kept at a minimum level.

E = 1: PM emissions $\leq 30 \text{ mg/Nm}^3$ *)

E = 2: PM emissions $\leq 20 \text{ mg/Nm}^3$ *)

E = 3: PM emissions $\leq 10 \text{ mg/Nm}^3$ *)

*) daily average value, if continuously monitored

M = 2: PM emissions are continuously monitored (see the annex)

M = 1: Dust emissions (PM) spot measurements are done at least once a year

$$P = E \times M$$

P = Points achieved

E = Emissions level

M= Monitoring level

Required evidence

Emissions protocol

E4.07 Mercury emissions

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 4 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement				2 points
Aggregate				

Cement: Score at least 2 points to obtain Platinum.

Mercury emissions are monitored and kept at a minimum level.

E = 2: Hg emissions $\leq 0.05 \text{ mg/Nm}^3$ *)

*) daily average value, if continuously monitored

M = 2: Mercury emissions are continuously monitored

M = 1: Mercury emissions spot measurements are done at least once a year. If Hg emissions are $\leq 0.025 \text{ mg/Nm}^3$, M = 1 is fulfilled if mercury emissions spot measurements are done at least once every two years.

$$P = E \times M$$

P = Points achieved

E = Emissions level

M = Monitoring level

Required evidence

Emissions protocol

E4.08 Clean air silos

Criterion Type

Plant

Points achievable for this criterion

Concrete: 3 points

Cement: 0 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement				
Aggregate				

Every cement / addition (secondary cementitious material (SCM)) silo has the following control measures:

Silo top baghouse or central vacuum collector system

AND

Silo overfill warning system (high bin indicators)

AND

Control measures are routinely maintained.

Required evidence

Photographic evidence

E4.09 Process and fugitive dust reduction measures

Criterion Type

Plant

Points achievable for this criterion

Concrete: 4 points

Cement: 4 points

Aggregate: 4 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				2 points
Cement				2 points
Aggregate				2 points

Score at least 2 points to obtain Platinum.

Dust suppression measures (see the annex) have been implemented to effectively reduce process and fugitive dust emissions.

Points achievable for this criterion:

• Concrete

up to 4:

- 2 for one measure
- 4 as of two measures implemented

• Cement

up to 4:

- 2 for one measure
- 4 as of two measures implemented

• Aggregates

up to 4:

- 2 for one measure
- 4 as of two measures implemented

Required evidence

Photographic evidence of one measure taken.

E5 - Water

Aim

To optimize water use and to ensure that discharged water is of a quality that does not harm the environment.

Total points achievable for this credit

Concrete: 13 points

Cement: 13 points (+1EP)

Aggregate: 13 points (+1EP)

E5.01 Water scarcity and impact

Criterion Type

Plant

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

For the area of the plant, water scarcity is assessed using recognized assessments (see the annex).

Required evidence

A copy of the water scarcity analysis incl. risk category.

OR

A copy of the ESIA including a water assessment.

E5.02 Water monitoring

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The company monitors and reports water consumption according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing or an equivalent water protocol (see the annex).

Required evidence

Proof that the company monitors and reports according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing or an equivalent water protocol

OR

Proof that the company was successfully audited against the GCCA/CSI charter within the last five years.

E5.03 Water target

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

Prerequisite to obtain, if the plant is located in water scarce areas according to E5.01.

The company has at least one publicly declared improvement target related to water withdrawal and regularly reports on its implementation progress. Possible targets include, but are not restricted to, the key performance indicators defined in the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing or an equivalent water protocol (see the annex).

Required evidence

Copy of a non-confidential document stating the target or link to the public statement detailing the water related target.

E5.04 Verification of water reporting

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

The company carries out assurance at least once every three years using recognized, independent assurance practitioners and the scope of assured data covers at least the total water withdrawal according to the GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing or an equivalent water protocol (see the annex).

Required evidence

Certification / Assurance report

OR

Proof that the company was successfully audited against the GCCA/CSI charter within the last five years.

E5.05 Report on water use and quality of discharged water

Criterion Type

Plant

Points achievable for this criterion

Concrete: 2 points **Cement:** 2 points **Aggregate:** 2 points

The plant reports water in terms of quantity of use, quality of the discharged water to its stakeholders on at least an annual basis.

The criterion is also awarded if - at the exception of sanitary water - no water is discharged.

Required evidence

Copy of the public report or link to the public website

OR

Minutes, letters or similar of the communication to stakeholders.

OR

Evidence that - at the exception of sanitary water - no water is discharged.

E5.06 Action for reduction of water consumption

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points **Cement:** 2 points **Aggregate:** 2 points

The company has achieved the previous water improvement target (E5.03) or, if the target is in the future, can show that it is on track to meet it.

OR

The plant has a recycling facility, which treats rainwater and water from washing trucks.

The criterion is also awarded if - at the exception of sanitary water - no water is discharged.

Required evidence

Proof that the target has been met, or, if the target is in the future, proof that the plant is on track to achieve it (=at least linear progress must be demonstrated)

OR

Evidence that a recycling facility for rainwater and water from washing trucks is in place, e.g.

- Photographic evidence
- Water flow diagrams
- Stormwater management plan incl. the reference to the recycling plant

OR

Evidence that - at the exception of sanitary water - no water is discharged.

E5.07 Action for improving the quality of discharged water

Criterion Type

Plant

Points achievable for this criterion

Concrete: 2 points **Cement:** 2 points **Aggregate:** 2 points

The plant has a system in place to enhance the quality of water discharged, e.g. by filtration or sedimentation.
The criterion is also awarded if - at the exception of sanitary water - no water is discharged.

Required evidence

Relevant evidence (e.g. photographic) that a system to enhance water quality is in place.

OR

Evidence that - at the exception of sanitary water - no water is discharged.

E5.08 (EP) Supplying water to nearby communities

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points **Cement:** 1 point **Aggregate:** 1 point

Exemplary Performance criteria:

The plant provides water to nearby communities.

Required evidence

Proof that water is supplied (e.g. contract or letter from the community) and water quality is monitored.

OR

In Countries where supplying water to the community is forbidden by law, evidence that the plant is supporting a water related project in the community.

E6 - Biodiversity

Aim

To maintain or enhance the biodiversity value and the ecosystems throughout the value chain, taking particular consideration of the often unique biodiversity in karst areas.

Total points achievable for this credit

Concrete: 0 points

Cement: 17 points

Aggregate: 17 points

E6.01 Biodiversity policy

Criterion Type

Company

Points achievable for this criterion

Concrete: 0 points

Cement: 2 points

Aggregate: 2 points

The company has a publicly available policy with biodiversity as an integral element.

Required evidence

Copy of the policy

AND

Proof of public availability.

E6.02 Biodiversity assessment

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 3 points

Aggregate: 3 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement		x	x	x
Aggregate		x	x	x

The plant has carried out a biodiversity assessment before starting quarrying operations or major expansions. The biodiversity assessment can be part of the Environmental and Social Impact Assessment (ESIA) and includes:

- The identification of key habitats/species/ecosystems, and associated mitigation measures if required
- Threats, risks and opportunities to biodiversity

Required evidence

Copy of the biodiversity assessment.

E6.03 High biodiversity value area assessment

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 3 points

Aggregate: 3 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement		x	x	x
Aggregate		x	x	x

The plant has been assessed on whether it overlaps or is in close proximity with a High Biodiversity Value Area (including protected areas and high biodiversity areas according to GRI Standard 304).

Required evidence

Copy of the site assessment, which can be part of the biodiversity assessment.

E6.04 Regular biodiversity value area assessment

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points **Cement:** 3 points **Aggregate:** 3 points

The plant carries out a biodiversity assessment on a regular basis, at least once every ten years.

Required evidence

Copy of the latest biodiversity assessment.

E6.05 Biodiversity management/action plan

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points **Cement:** 3 points **Aggregate:** 3 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement		x	x	x
Aggregate		x	x	x

Prerequisite to obtain if the plant is in or close to high biodiversity value areas according to E6.03

The plant has a biodiversity management plan (BMP) or a biodiversity action plan (BAP) in place which includes mitigation related to any adverse impacts to nationally/ internationally important biodiversity. Prioritization should be given to avoidance and minimization of impacts to biodiversity, e.g. by invasive alien species (non-native species).

The inclusion of biodiversity management in the Environmental Management System (EMS) would be the equivalent to a BMP/BAP.

Required evidence

A copy of the BMP or BAP.

E6.06 Biodiversity impact assessment

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points **Cement:** 3 points **Aggregate:** 3 points

The plant assesses and monitors its impact on biodiversity in line with the sequential steps of the mitigation hierarchy: avoid, minimize and mitigate, using a recognized methodology (see the annex).

Required evidence

A copy of the impact assessment or monitoring report.

E7 - Secondary Materials

Aim

- To reduce the consumption of primary materials by avoiding waste or using secondary materials (including recycled materials) where available and technically, ecologically, and economically reasonable.
- To contribute to a circular economy.

Total points achievable for this credit

Concrete: 15 points (+1EP)

Cement: 10 points

Aggregate: 0 points

E7.01 Assessment of the availability of secondary materials

Criterion Type

Plant

Points achievable for this criterion

Concrete: 3 points

Cement: 3 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete			x	x
Cement			x	x
Aggregate				

Cement: A documented assessment on the availability of secondary raw materials for clinker and cement production, covering the country or region where the plant requesting certification is located, is done at least every three years.

Concrete: A documented assessment on the availability of secondary raw materials for concrete production, covering the country or region where the plant requesting certification is located, is done at least every three years.

Required evidence

Evidence that an assessment was performed during the past 3 years.

E7.02 Policy on usage of secondary materials

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 0 points

A policy is available that favors the increasing use of secondary materials where this is ecologically reasonable and technically and economically possible.

Required evidence

Copy of the policy

E7.03 Reporting of the use of secondary materials

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 0 points

The use of secondary materials is regularly monitored and reported at least on an annual basis.

Required evidence

Copy of the last report which summarizes the use of secondary materials. Upon certification, the report is not older than one year.

E7.04 Responsible processing of returned concrete

Criterion Type

Plant

Points achievable for this criterion

Concrete: 3 points

Cement: 0 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement				
Aggregate				

The plant ensures that returned concrete is processed in a responsible manner instead of being landfilled. Responsible processing includes among others

- recycling - prior to hardening - the returned concrete with the purpose to reuse the aggregates and the water
- recycling the hardened concrete into aggregates
- casting the returned concrete into concrete goods
- having contractual arrangements with third parties that ensure responsible processing of the returned concrete on behalf of the plant

Required evidence

Evidence that returned concrete is processed in a responsible manner, e.g.

- photo evidence of recycling plant
- photo evidence of concrete good production installation and production related data
- copy of contractual arrangements

E7.05 Optimized use of secondary materials

Criterion Type

Plant

Points achievable for this criterion

Concrete: 3 points **Cement:** 3 points **Aggregate:** 0 points

The plant has optimized the use of secondary materials (specific per unit of product) in line with the assessment according to E7.01.

OR

Concrete:

The criterion can also be fulfilled if measures (no older than 3 years) were implemented to reduce the amount (= percentage) of returned concrete.

OR

Concrete:

An increased use of manufactured sand and aggregates as replacement for natural material over the past 3 years is an eligible alternative to gain 1 Point.

Required evidence

Concrete (1 Point):

Evidence showing the increased use of manufactured sand and aggregates vs. natural material over the past 3 years at the moment of certification.

Evidence of the optimized use of secondary materials.

OR

Concrete (3 Points):

Evidence showing the measures (no older than 3 years) implemented to reduce the amount of returned concrete.

AND

Amount (= percentage) of returned concrete prior and after implementing such measures.

OR

Concrete (1 Point):

Evidence showing the increased use of manufactured sand and aggregates vs. natural material over the past 3 years at the moment of certification.

E7.06 Optimized use of secondary materials on project level

Criterion Type

Plant

Points achievable for this criterion

Concrete: 2 points **Cement:** 0 points **Aggregate:** 0 points

The plant has optimized the use of secondary materials on a project.

Required evidence

Evidence of the optimized use of secondary materials on at least one project.

E7.07 (EP) Responsible processing of 'non-concrete' materials

Criterion Type

Plant

Points achievable for this criterion

Concrete: 1 point

Cement: 0 points

Aggregate: 0 points

Exemplary Performance:

The plant processes waste materials other than concrete, such as returned gypsum based products, e.g. floor screeds, or glass or similar, and by doing so prevents landfill. Responsible processing includes among others

- recycling of waste materials other than concrete
- collecting the waste materials for further use, e.g. as raw material for the production of other materials or for use in other processes
- having contractual arrangements with third parties that ensure responsible processing of the returned waste materials on behalf of the plant

Required evidence

Evidence that returned material is processed in a responsible manner, e.g.

- photo evidence of recycling plant/facility
- copy of contractual arrangements



E8 - Transport

Aim

To minimize environmental impact of transportation.

Total points achievable for this credit

Concrete: 5 points (+2EP)

Cement: 5 points (+2EP)

Aggregate: 5 points (+2EP)

E8.01 Transport policy

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

The organization has a policy that addresses the environmental impacts of the transport of materials and products to customers.

Required evidence

A copy of the policy.

If an external company takes over the transport service, it must be ensured that the policy also takes this into account.

E8.02 Transport management system

Criterion Type

Plant

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The plant has a dispatching system in place that contains e.g. operations related transportation data in terms of modes of transportation and distances covered. Distances travelled by contractors are also covered.

Required evidence

Extract of the transportation management system (or logistical disposition system) showing that it contains the required items.

E8.03 Fuel saving awareness training

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

The organization performs training of its own and/or external drivers to create awareness for fuel efficient driving.

Required evidence

Copy of relevant training material/information

AND

participant list.

E8.04 (EP) Next generation trucks

Criterion Type

Plant

Points achievable for this criterion

Concrete: 2 points **Cement:** 2 points **Aggregate:** 2 points

Exemplary Performance:

The plant uses trucks with innovative, CO2 emission reducing drive technology.

Points achievable for this criterion:

Concrete	Cement	Aggregates
Up to 2 Points		
2 points if the innovative technology drives the main engine and drum.	2 Points If the innovative technology drives the main engine.	2 Points If the innovative technology drives the main engine.
1 point if the innovative technology drives the rotating drum only.		

Required evidence

Evidence that at least one truck with innovative drive technology is used as a permanent, integral part of the truck fleet.

For accepted innovative, CO2 emission reducing drive technologies see the annex.

E9 - Secondary Fuels

Aim

- To reduce fossil fuel consumption by using secondary fuels where available.
- To ensure that the use of alternative fuels has no health and safety or environmental impact during sourcing, transportation, handling, production, on the final product and its end of life.
- To contribute to waste reduction through resource recovery.

Total points achievable for this credit

Concrete: 0 points

Cement: 7 points

Aggregate: 0 points

E9.01 Use of restricted waste

Criterion Type

Company

Points achievable for this criterion

Concrete: 0 points

Cement: 1 point

Aggregate: 0 points

The company must commit to not use 'commonly restricted waste' as defined in the GCCA Sustainability Guidelines for co-processing fuels and raw materials in cement manufacturing..

Required evidence

Written commitment of the senior management

OR

Proof that the Company was successfully audited against the CSI/GCCA Sustainability charter within the last five years

E9.02 Assessment of alternatives

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 1 point

Aggregate: 0 points

Criteria E9.01 is met

AND

There is an assessment and documentation on the availability of alternative fuels. This assessment must be reviewed at least every three years.

Required evidence

Evidence that an assessment was performed during the past 3 years.

E9.03 Assessment of non-harmful alternatives fuels

Criterion Type

Company

Points achievable for this criterion

Concrete: 0 points **Cement:** 3 points **Aggregate:** 0 points

Criteria E9.01 is met

AND

The company uses alternative fuels following the GCCA Sustainability Guidelines for co-processing fuels and raw materials in cement manufacturing..

Required evidence

E9.01 is met

AND

Confirmation that an audit against the CSI/GCCA Sustainability charter was successfully performed within the last five years.

OR

Written report from the auditor confirming that the company is following the GCCA Sustainability Guidelines for co-processing fuels and raw materials in cement manufacturing.

E9.04 Communication and stakeholder involvement

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points **Cement:** 2 points **Aggregate:** 0 points

Criteria E9.01 is met

AND

Evidence that the local community has been involved in the decision-making process for using alternative fuels.

Required evidence

E9.01 is met

AND

Minutes, protocols of stakeholder consultation and alignment processes.

Social

S1 - Local Community

Aim

To contribute to create long-term value in the community in which the company operates.

Total points achievable for this credit

Concrete: 14 points

Cement: 14 points

Aggregate: 14 points

S1.01 Policy

Criterion Type

Company

Points achievable for this criterion

Concrete: 4 points

Cement: 4 points

Aggregate: 4 points

The company has a policy in place to engage with the local community on a regular basis (at least once every three years if there are no major changes affecting the local community).

Required evidence

A copy of the policy.

S1.02 Social investment

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The company has a written policy to invest resources in initiatives and programs aimed at improving the social aspects of community life through for example the following:

- taking into account the promotion of community development in planning social investment projects;
- avoiding actions that perpetuate a community's dependence on the company's philanthropic activities, ongoing presence or support;
- partnering with other organizations, including government, business or non-governmental organizations (NGOs) to maximize synergies and make use of complementary resources, knowledge and skills;
- contributing to programs that provide access to food and other essential products for vulnerable or discriminated groups and persons with low income;
- taking into account land devaluation and displacement;
- improving the local infrastructure

Required evidence

A copy of the policy

S1.03 Communication & information

Criterion Type

Plant

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				
Cement			x	x
Aggregate				

The plant actively communicates with and informs the local community on all aspects that have or could significantly impact on them, such as increase/decrease of economic activities (extension/reduction of the plant), pollution (land, air, water, noise) and traffic.

Required evidence

Evidence of active communication and information, such as meetings with local authorities,, information sessions, flyers, folders and other forms of communication that actively seek to reach the local community.

S1.04 Noise/vibration management plan

Criterion Type

Plant

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

- A noise and/or vibration management plan is in place.
- Stakeholders representing the local community have been informed when implementing the plan, unless no residential areas are affected.

Required evidence

Copy of the noise and/or vibration management plan

OR

equivalent evidence such as e.g. national law or a building/operational permit with a reference to noise limits and/or noise management

Evidence of the stakeholder consultation

OR

equivalent evidence such as e.g. building/operational permit in case a dialogue is part of the requirements and if noise protection is covered by national law

OR

evidence that no residential areas are affected by noise from the plant (e.g. zoning plan or other suitable maps)

S1.05 Implementation of the noise/vibration management plan

Criterion Type

Plant

Points achievable for this criterion

Concrete: 3 points **Cement:** 3 points **Aggregate:** 3 points

Concrete:

The strategies of the noise management plan have been implemented.

Cement and Aggregates:

The strategies of the noise management plan have been implemented, and vibration where blasting is involved
If mining operations use blasting, the implemented management plan includes

- monitoring vibrations in nearby communities (measurements shall be done in appropriately selected internal and external points)

AND

- showing demonstrable efforts to reduce vibrations in nearby communities (e.g. use of ripping in most sensitive areas, use of pioneering blasting techniques to reduce vibrations beyond the site).

Required evidence

Concrete:

Evidence of the measures taken, e.g. photos.

Cement, aggregates:

Evidence of the measures taken, e.g. monitoring protocols or photos

OR

A management declaration, if no blasting is done

S1.06 Safety around site for the local community

Criterion Type

Plant

Points achievable for this criterion

Concrete: 2 points **Cement:** 2 points **Aggregate:** 2 points

The plant has taken active safety measures such that risks of injuries to passerby are minimized, such as:

- proper fences or clear identification of the industrial area around the site;
- signs to warn of any risks (e.g. swimming, fishing, high voltage)
- communications for the local community explaining site safety hazards

Required evidence

Evidence (photographs) of the measures taken.

S1.07 Transport to and from the site

Criterion Type

Plant

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Measures are taken to minimize the risk of accidents in the local community related to site transportation, such as:

- clear routing for trucks to the site(s)
- measures that reduce the risk of accidents (e.g. fences around play areas, accident prevention on trucks)

Required evidence

Evidence (photographs) of the measures taken

S2 - Health Product Information

Aim

To protect human health and well-being of clients and users of the product.

Total points achievable for this credit

Concrete: 6 points

Cement: 3 points

Aggregate: 0 points

S2.01 Public availability of information about product risks and safety

Criterion Type

Company

Points achievable for this criterion

Concrete: 3 points

Cement: 3 points

Aggregate: 0 points

Current ingredient disclosures conform to criteria established by a third party along the lines of accepted regulations or frameworks (see the annex). Information is publicly available and addresses measurements on minimizing the risks associated with using the product.

Required evidence

Link or an exemplary copy of current, publically available disclosures such as safety data sheets.

S2.02 Proactive awareness downstream

Criterion Type

Company

Points achievable for this criterion

Concrete: 3 points

Cement: 0 points

Aggregate: 0 points

The company proactively makes downstream users (particularly small builders and do-it-yourself (DIY)) aware of the risk of using the product and how they may be minimized.

This criterion is achieved by default for precast concrete products.

Required evidence

Evidence of the proactive approach towards downstream users, like written user instructions, tutorials, training conducted or similar.

S3 - Occupational Health & Safety

Aim

- to ensure the inclusion of workers into occupational safety and health (OSH) matters
- to protect the physical, mental and social well-being of workers
- to prevent harm to health caused by working conditions

Total points achievable for this credit

Concrete: 20 points

Cement: 20 points

Aggregate: 20 points

S3.01 Risk analysis

Criterion Type

Plant

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The company analyses and controls the health and safety risks involved in its activities at least once every two years.

Required evidence

Evidence of the analysis - not older than two years at the moment of certification (e.g. by providing exemplary documents covering plants within the scope of certification).

S3.02 Risk analysis at least on an annual basis

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point **Cement:** 1 point **Aggregate:** 1 point

The company analyses and controls the health and safety risks involved in its activities at least once every year.

Required evidence

Evidence of the analysis - not older than one year at the moment of certification.

S3.03 Preventive actions

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points **Cement:** 2 points **Aggregate:** 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete			x	x
Cement			x	x
Aggregate			x	x

The company takes preventive actions based on the findings of S3.01 and S3.02, including specifying appropriate personal protective equipment (PPE), where appropriate.

Required evidence

Evidence that shows implementation actions, e.g. photographs of new equipments, educational documents, other documents providing evidence that measures have been taken

S3.04 Occupational health and safety policy

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The company has an OHS policy in place which for example refers to:

- the scope of the policy
- training for health and safety
- toolbox instructions
- health and safety related measures
- registration of illness and safety incidents
- responsibilities

Required evidence

Copy of the policy

S3.05 Availability of the OHS policy

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete			x	x
Cement			x	x
Aggregate			x	x

The policy is shared with, and is available to every employee.

Required evidence

Evidence that the policy is available to all employees.

S3.06 Access to medical treatment

Criterion Type

Plant

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The plant ensures quick access to medical treatment.

AND

If the plant has regularly more than five employees per shift on site, there should be at least one trained first aider in each shift.

Required evidence

Evidence about the availability of 1st aid or medical treatment within reasonable proximity.

Evidence that there is at least one trained first aider in each shift (e.g. shift plans, number of trained first aiders)

OR

Evidence that normally not more than five employees per shift are on site (e.g. shift plans).

S3.07 Access to clean drinking water

Criterion Type

Plant

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

Access to clean drinking water and sanitation for all workforces on site must be guaranteed.

Required evidence

Evidence about the access to clean drinking water and sanitation, e.g. signed WASH pledge or photographs of facility or water quality report of municipality.

S3.08 Training on health and safety

Criterion Type

Plant

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The employees receive an introduction and are regularly trained on health and safety issues related to their work. For example:

- by instructions
- meetings with employees addressing health and safety issues

Required evidence

e.g. minutes of training, scripts of educational training not older than three years at the moment of certification.

S3.09 Recording of incidents

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The company records:

- near misses*;
- medical incidents*;
- lost time injuries*;
- fatalities*

(*) equivalent terminologies may apply

Required evidence

Record/statistics not older than one and half years at the moment of certification.

S3.10 Corrective actions based upon incidents

Criterion Type

Company

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The company analyses the following incidents and implements corrective actions:

- fatal incidents
- potential fatal incidents or near misses
- lost time incidents
- medical treatments

Required evidence

Documentation of the analysis and corrective actions, where applicable, taken after an incident

S3.11 No Lost Time Injuries (LTI) during the last three years

Criterion Type

Plant

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

The plant has had no Lost Time Injuries (LTI) during the last three years at the moment of certification.

Required evidence

Evidence in the record/statistics that no LTI incidents have occurred at the plant during the last three years at the moment of certification.

S3.12 No fatality during last three years

Criterion Type

Plant

Points achievable for this criterion

Concrete: 2 points

Cement: 2 points

Aggregate: 2 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				x
Cement				x
Aggregate				x

The plant has had no fatality involving employees, contractors and third parties during the last three years at the moment of certification.

Required evidence

Evidence in the record/statistics that no fatal incidents have occurred at the plant during the last three years at the moment of certification.

S4 - Labor Practices

Aim

To ensure the fair and equitable treatment of workers.

Total points achievable for this credit

Concrete: 8 points (+1EP)

Cement: 8 points (+1EP)

Aggregate: 8 points (+1EP)

S4.01 Policy on social protection

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Where changes in operations would have major employment impacts, the company has a written commitment to provide reasonable notice to the appropriate authorities and representatives of the workers so that the implications may be examined jointly to mitigate any adverse impact to the greatest possible extent.

Required evidence

Copy of a formal document containing this commitment

OR

local law in case this fulfills the requirement.

S4.02 Personal record for all employees

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point **Cement:** 1 point **Aggregate:** 1 point

Every employee has a personal record dossier with proof of education and safety training relevant to the tasks the employees perform.

AND

All personal data and the privacy of the workers are protected against unauthorized access.

Required evidence

Evidence of the existence of personal records for all employees, for example a picture of the cover of the records of different people with different functions, or a letter signed by the person responsible for human resources that explains that records are kept for all employees.

OR

Relevant local laws.

Explanation, where possible supported by photographic evidence (e.g. a locked room, filing cabinet or password protected program), of how personal data is protected.

OR

Relevant local laws.

S4.03 Access to personal record for all employees

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point **Cement:** 1 point **Aggregate:** 1 point

All employees are granted access to their personal record upon first request.

Required evidence

Copy of a formal document containing this right to access.

OR

Relevant local laws

S4.04 Personal evaluation

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

An appraisal procedure is in place which foresees regular evaluation meetings with the employee; the results of the meeting being signed off by the employee.

Required evidence

Representative sample of cover sheets of current evaluation reports for different employees with different functions

AND

A copy of the appraisal procedure.

S4.05 Availability of job profiles

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

A profile has been made for every job

Required evidence

A copy of a number of representative function profiles.

S4.06 Skills development in the workplace

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete			x	x
Cement			x	x
Aggregate			x	x

All workers at all stages of their work experience are provided with access to skills development, training and apprenticeships, and opportunities for career advancement.

Required evidence

Evidence of access to skills development

S4.07 Preventive medical examination

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Regular preventive medical examination is offered to all employees at no cost at least every three years as recommended in the GCCA health management handbook.

Required evidence

Evidence of preventive medical examination no older than three years

S4.08 Work-life balance

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete			x	x
Cement			x	x
Aggregate			x	x

Work-life balance in terms of reasonable working hours, parental and family leave opportunities, overtime voluntary, overpaid and infrequent, and other social services.

Conditions of work permit work-life balance in terms of reasonable working hours (overtime is voluntary and infrequent), parental leave and child care, and other services.

Required evidence

Evidence that choices in work-life balance are possible, such as evidence of facilities, voluntary contractual agreements

OR

Evidence (e.g. exemplary time sheets), that working hours comply with contract or locals laws

OR

Reference to local law (where applicable).

S4.09 (EP) External control of social standards and compliance with human rights

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Exemplary Performance criteria:

There is a reasonable level of external control of social standards and compliance with human rights via a dedicated external adequacy audit (see the annex).

Required evidence

Adequacy investigation comprising the following elements of human rights management:

1. Culture (includes "tone from the top")
2. Objectives
3. Risks (includes risk assessments, reporting, KPIs)
4. Programme (includes policy, whistleblowing, case management, sanctions)
5. Organisation
6. Communication (includes communication concept and trainings)
7. Controls (including audits)

(for adequate evidence see the annex)

Economics

B1 - Local Economy

Aim

To promote the adoption of practices for the economic benefits of the local community.

Total points achievable for this credit

Concrete: 4 points

Cement: 4 points

Aggregate: 4 points

B1.01 Local Economy

Criterion Type

Plant

Points achievable for this criterion

Concrete: 4 points

Cement: 4 points

Aggregate: 4 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The plant serves the needs of- and supports the local economy.

Required evidence

Evidence where the local economy is supported, e.g. by local hire, local training, local suppliers, involvement of local businesses etc., taking into account the legal boundaries.

B2 - Ethical Business

Aim

To operate the business in a fair and ethical manner.

Total points achievable for this credit

Concrete: 9 points

Cement: 9 points

Aggregate: 9 points

B2.01 Ethical risk assessment

Criterion Type

Company

Points achievable for this criterion

Concrete: 3 points

Cement: 3 points

Aggregate: 3 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete		x	x	x
Cement		x	x	x
Aggregate		x	x	x

The company conducts and documents risk assessments of its operations focused on the avoidance of bribery and corruption, fair marketing, and respect of property rights, with maximum intervals of three years.

Required evidence

Evidence that a risk assessment has been performed less than 3 years before; this can be a confirmation that the auditor has seen the assessment or a copy of the assessment

B2.02 Policy or code for ethical business

Criterion Type

Company

Points achievable for this criterion

Concrete: 3 points **Cement:** 3 points **Aggregate:** 3 points

The company has a policy (or a number of policies) or code of business ethics (or a number of codes) in place. The policy (policies, code/codes) includes procedures that cover anti-corruption, fair competition and marketing, respect for property rights, responsible political involvement and confidential investigation.

Required evidence

A copy of the code, proving that suppliers are within the scope.

B2.03 Confidential investigation

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point **Cement:** 1 point **Aggregate:** 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete			x	x
Cement			x	x
Aggregate			x	x

The organization has a mechanism for confidential investigation, resolution and reporting of suspected cases of bribery and/or corruption in place.

Required evidence

Evidence that a mechanism for confidential investigation (on company level) is in place. E.g.:

- a company hotline
- a publicly available telephone number to submit a complaint

B2.04 Responsible political involvement

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point **Cement:** 1 point **Aggregate:** 1 point

The company has training in place to secure the ethical business behaviour of its relevant employees.

Required evidence

Evidence of the training procedure, program, exemplary certificates or similar.

B2.05 Respect for property rights

Criterion Type

Company

Points achievable for this criterion

Concrete: 1 point **Cement:** 1 point **Aggregate:** 1 point

The company recognizes property rights, both physical and intellectual.

Required evidence

A policy or statement addressing respecting property rights.

B3 - Innovation

Aim

To stimulate

- the development and implementation of new solutions that contribute to the sustainability of the operations, its products, its suppliers or other parts of the value chain,
- execution of best practices in the field of sustainability that are not covered by this certification systems, and
- exemplary performance under any criterion in this system.

Total points achievable for this credit

Concrete: 9 points

Cement: 9 points

Aggregate: 9 points

B3.01 Innovative solutions and/or exemplary performance

Criterion Type

Company

Points achievable for this criterion

Concrete: 9 points

Cement: 9 points

Aggregate: 9 points

The company develops, tests and/or implements innovative practices/products or demonstrates exemplary performance in the field of responsible sourcing in the sense of this CSC system and beyond.

Required evidence

The approval letter of the Innovation Committee, including the number of points to be awarded for the innovation or exemplary performance.

The formal process of applying for the Innovation Credit is described in the Innovation Credit Guidelines (see the annex).

B4 - Feedback Procedure

Aim

To establish a channel that allows the local community, employees and customers to provide feedback to the company.

Total points achievable for this credit

Concrete: 3 points

Cement: 3 points

Aggregate: 3 points

B4.01 Feedback and complaints procedure for the local community

Criterion Type

Plant

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete			x	x
Cement			x	x
Aggregate			x	x

A feedback and complaint procedure and complaint facility is in place for the local community.

Required evidence

Link on website

OR

phone number

OR

Email address

OR

contact details of a responsible person to handle the complaints.

The contact can also be on company level, as long as it covers local complaints/grievance.

B4.02 Feedback and complaints procedure for employees

Criterion Type

Plant

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

A feedback and complaint procedure and complaint facility is in place for employees.

Required evidence

Link on website

OR

phone number

OR

Email address

OR

contact details of a responsible person to handle the complaints. The contact can also be on company level, as long as it covers local complaints/grievance.

B4.03 Feedback and complaints procedure for customers

Criterion Type

Plant

Points achievable for this criterion

Concrete: 1 point

Cement: 1 point

Aggregate: 1 point

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete			x	x
Cement			x	x
Aggregate			x	x

A feedback and complaint procedure and complaint facility is in place for customers.

Required evidence

Link on website

OR

phone number

OR

Email address

OR

contact details of a responsible person to handle the complaints. The contact can also be on company level, as long as it covers local complaints/grievance.

Chain of Custody

C1 - Cement

Aim

To stimulate the use of sustainable and responsible sourced cement.

Total points achievable for this credit

Concrete: 100 points

Cement: 0 points

Aggregate: 0 points

C1.01 Weighted average of cement suppliers percentages

Criterion Type

Plant

Points achievable for this criterion

Concrete: 100 points

Cement: 0 points

Aggregate: 0 points

The weighted average percentage of the cement supplied to the concrete plant undergoing certification. This percentage is calculated by the CSC supply chain calculation tool.

For calculating the percentage of cement supplied from different suppliers, data from the last calendar year must be used. If this data is not available, data of the previous year must be used.

Required evidence

The calculation-sheet with the weighted average percentage of the cement suppliers.

AND

A confirmation from the auditor that the percentage of supply is correct.

C1.02 Supply chain coverage and CSC supplier certificate

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				x
Cement				
Aggregate				

For the CSC-certification level of "Platinum" a concrete plant must provide evidence for a cement supply chain coverage of 75%. The coverage is proven by the respective mass of cement supplied from producers holding a CSC certificate at the level "Gold" or "Platinum".

Required evidence

Supply chain report and supplier certificate(s).

C2 - Aggregates

Aim

To stimulate the use of sustainable and responsible aggregates.

Total points achievable for this credit

Concrete: 100 points

Cement: 0 points

Aggregate: 0 points

C2.01 Weighted average of aggregate suppliers percentages

Criterion Type

Plant

Points achievable for this criterion

Concrete: 100 points

Cement: 0 points

Aggregate: 0 points

The weighted average percentage of the aggregates supplied to the concrete plant undergoing certification. This percentage is calculated by the CSC supply chain calculation tool.

For calculating the percentage of aggregates supplied from different suppliers, data from the last calendar year must be used. If this data is not available, data of the previous year must be used.

Required evidence

The calculation-sheet with the weighted average percentage of the aggregate suppliers.

AND

A confirmation from the auditor that the percentage of supply is correct.

C2.02 Supply chain coverage and CSC supplier certificate

Criterion Type

Plant

Points achievable for this criterion

Concrete: 0 points

Cement: 0 points

Aggregate: 0 points

Prerequisite to obtain

	Bronze	Silver	Gold	Platinum
Concrete				x
Cement				
Aggregate				

For the CSC-certification level of "Platinum" a concrete plant must provide evidence for an aggregate supply chain coverage of 75%. The coverage is proven by the respective mass of aggregate supplied from producers holding a CSC certificate at the level "Gold" or "Platinum"

Required evidence

Supply chain report and supplier certificate(s).